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Greek Medicine in its Relation to Religion and Magic

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In the historiography of Greek medicine religious and magical healing, in general, are dealt with only occasionally and very briefly. No one will deny that, throughout antiquity, incubations played an important rôle, nor will it be disputed that incantations, at least in later centuries, were of great importance. But since these are factors abhorrent to modern science, they are not interesting to the modern historian either.

The neglect of religious and magical medicine seems the more justifiable because, according to the prevailing opinion, Greek medical art itself dispensed with religion and magic. Traces of these, if they are to be found in any period at all, soon became "rather of the drapery than of the body of medicine."¹ Religious cures, "the half-world"² of scientific medicine, and magical rites, its superstitious caricature—so to speak—are said to have been rejected by the Greek physicians themselves. The abrogation of religious and magical thought is therefore considered even as characteristic of the Greek attitude and as significant for the difference between it and

* I wish to express my gratitude to Mrs. H. Cherniss for revising my English.

¹ T. Clifford Allbutt, *Greek Medicine in Rome*, London, 1921, p. 31: "In Greece the theurgic invocations of Apollo Paeon, of Chiron, of Aesculapius, seem soon to have become, as in the Oath, rather of the drapery than of the body of medicine."

² W. W. Tarn, *Hellenistic Civilization*, London, 1930, p. 272.

the Roman mode of thinking.³ There is no need for more than a perfunctory consideration of those unscientific conceptions.

It is true, religion and magic are very seldom, almost never, mentioned in Greek medical treatises; if they occur, they are usually discussed in a negative sense. At first glance it seems, therefore, safe to conclude that they were of no importance, at least up to the time of Galen. Later, while Galen's rational medicine was still preserved in the encyclopedias, the new and prevailing spirit of medicine was that of religion and magic. But those centuries are called the decadence of ancient medicine. There is hardly another term used to describe this period, so strong is the conviction that scientific medicine cannot have anything in common with religious and magical forces.⁴ Some scholars recognize the fact that religion and magic became apparent only in the Byzantine epoch but began to influence medicine long before Galen.⁵ They date the decline earlier. According to them the rational treatment of Coan and Cnidian physicians was already contaminated in the 4th century B. C. For Hippocratic medicine did not outlive Platonic methods; from the Hellenistic era on it became speculative and even superstitious. Thus medicine, like all the other sciences, collapsed long before the close of antiquity.⁶

³ T. Clifford Allbutt, l. c.: "In Rome, and not during the Republic only, theurgic, or hierurgic, or magical craft 'and those who used curious arts' were of the body of it; drugs and operations were but auxiliaries."

⁴ H. O. Taylor, *Greek Biology and Medicine (Our Debt to Greece and Rome)*, 1922, especially p. 122. Identical in its principle is the representation of the history of Greek medicine in Gercke-Norden, *Einleitung in die Altertumswissenschaft*, II, 5⁴, *Exakte Wissenschaften v. A. Rehm und K. Vogel*, Leipzig, 1933. Cf. also U. v. Wilamowitz-Moellendorf, *Die Griechische Literatur des Altertums (Die Kultur der Gegenwart*, I, 8³, 1912, p. 250). Ivan Bloch, *Byzantinische Medizin (Handbuch der Geschichte der Medizin, herausgegeben v. M. Neuburger und J. Pagel*, Jena, 1902, I, p. 508). A certain superiority of Greek medicine over the Roman is thereby acknowledged even for the latest centuries, cf. Gercke-Norden, l. c., p. 77 and M. Neuburger, *Geschichte der Medizin*, II, 1, 1911, p. 3. Cf. also S. Runciman, *Byzantine Civilization*, London, 1933, pp. 132; 237.

⁵ M. Neuburger, l. c., pp. 3-4.

⁶ W. H. S. Jones, *Hippocrates, with an English translation (Loeb Classical Library)*, I, 1923, p. 8: "[In Greek medicine] the two methods, that of Greek philosophy and that of modern science, stand face to face. The struggle between them was, for the time being, short. Medicine, almost the only branch of Greek science scientifically studied, was worsted in the fight, and medical science gradually degenerated from rational treatment to wild speculation and even quackery and superstition. The transcendant genius of Plato, strong in that very power of per-

Now it is easy to argue that from a purely historical aspect these limitations and valuations cannot be accepted. Medicine, imbued with religion and magic or freed from both of them, medicine after Galen or in the Hellenistic period is, after all, Greek medicine; Greek medical literature is, indeed, an accumulation of the most different writings.⁷ One must depict the facts as they are without any prejudice and properly determine the share which each of the different forms of treatment had in reality.

But this is not enough. There are not only "three lines of possible approach which may be described as the secular, the magical and the religious,"⁸ each one of them of equal historical value, and each strictly separated from the others. That religious medicine at least changed a good deal by taking over results of scientific medicine, by becoming more rational, is a fact generally believed.⁹ Yet an influence of religious and magical ideas on science is also conceivable. It can be denied only if it is true that the conception of medical art necessarily devoid of any religious and magical content was adopted by the ancient physicians. Whether this was generally

suasion the use of which he so much deprecated, won the day. The philosophic fervor which longed with passionate desire for unchangeable reality, that felt a lofty contempt for the material world with its ever-shifting phenomena, that aspired to rise to a heavenly region where changeless Ideas might be apprehended by pure intelligence purged from every bodily taint, was more than a match for the humble researches of men who wished to relieve human suffering by a patient study of those very phenomena that Plato held of no account. So for centuries philosophy flourished and science languished, in spite of Aristotle, Euclid and Archimedes." Withington in his contribution to W. H. S. Jones, *Malaria and Greek History*, Manchester, 1909, pp. 154 sq., expresses the same opinion, although he gives a different explanation.

⁷ Charles Singer, *Greek Biology and Greek Medicine*, Oxford, 1922, p. 80-81, is quite right in stating: "That mass [of Greek medical learning] contained much dross, material that survived from early as from late Greek times which was hardly, if at all, superior to the debased compositions that circulated in the name of medicine in the middle centuries. The recovered Greek medical writings also contained some material of the purest and most scientific type."

⁸ W. R. Halliday, *The Treatment of Disease in Antiquity* (in "Greek Poetry and Life," Essays presented to G. Murray, Oxford, 1936, p. 277). But he, too, calls Galen "the last Greek medical scientist of antiquity. Man's mind had moved from a scientific towards a religious and magical view of the universe." (p. 293).

⁹ Cf. R. Herzog, *Die Wunderheilungen von Epidauros*, Philologus, Supplement XXII, III, 1931, pp. 145-147; cf. also O. Weinreich, *Antike Heilungswunder*, Religionsgeschichtliche Versuche u. Vorarbeiten, VIII, 1, 1909, p. 110.

the case is not to be decided without further proof; the reticence concerning religion and magic, even their rejection in many cases, does not suffice as an argument. For these are ambiguous instances which have to be interpreted first. Such an inquiry is also important, since religious healing and magical rites used by patients throughout antiquity and relied on in ever-increasing measure, presented if not a theoretical, at least a practical problem to the physicians. Did the physicians recognize the practice of priests and magicians as a means outside their own activity or did they renounce it as being worthless and even false? Their reaction must have depended largely on their theoretical attitude towards religious and magical ideas.

These are the problems involved in the relation of Greek medicine to religion and magic. It is with their discussion and with the description of the historical situation that I shall try to deal, testing the character of Greek medicine in regard to the explanation and to the treatment of diseases. In doing this I cannot base my argument on any continuous ancient debate of the subject; no such book is preserved. It is necessary to rely on single phrases to be found in the different writings and to take them as a clue to the underlying general ideology. This is a laborious procedure. A vast material must be collected and the judgment must be always restricted and modified. But no other way is left for an approach to the problem which is so important for the adequate interpretation of Greek medicine.

I

THE EXPLANATION OF DISEASES

By the Hippocratic as well as by the later physicians, the causes of illnesses are held to be first of all the effect upon the human body of cold, warmth, sun, air, and climate. This, no doubt, is a natural explanation and to many physicians it means this and nothing more. A follower of Anaxagoras in the 5th century B. C., an Epicurean or Sceptic in the Hellenistic centuries and later, each considers the celestial phenomena as appearances of nature, devoid of God.¹⁰

But this, to be sure, is not the only, not even the most usual meaning expressed by those conceptions. The Hippocratic book on the

¹⁰ Cf. the corresponding medical theories p. 206.

Sacred Disease states: "This disease . . . comes from the same causes as others, from the things that come to and go from the body, from cold, sun, and from the changing restlessness of winds. These things are divine, . . ." ¹¹ Later, for physicians who follow Plato and Aristotle, the divinity of sun and stars and climate is unquestionable; nor are the forces of the lower world, air and water, deprived of divinity.¹² The Stoic physicians firmly believe in the divine character of the forces of nature. On the other hand, the interpretation of the gods as natural powers is very common and very Greek. Some declare that "the Phoenicians had better notions about the gods than the Greeks, giving as an instance that to Asclepius they assign Apollo as father, but no mortal woman as his mother. Asclepius . . . is air, bringing health to mankind and to all animals likewise; Apollo is the sun, and most rightly is he named the father of Asclepius, because the sun, by adapting his course to the seasons, imparts to the air its healthfulness." But the answer is that: "The argument was as much Greek as Phoenician; for at Titane in Sicyonia the same image is called both, Health and . . . thus clearly showing that it is the course of the sun that brings health to mankind." ¹³ All these instances reveal how utterly different are the ancients' conceptions of natural phenomena from those of modern times.

¹¹ Jones, l. c., II, p. 183: *Αὕτη δὲ ἡ νοῦσος . . . γίνεται ἀφ' ὧν καὶ αἱ λοιπαὶ, ἀπὸ τῶν προσιόντων καὶ ἀπιόντων, καὶ ψύχεος καὶ ἡλίου καὶ πνευμάτων μεταβαλλομένων τε καὶ οὐδέποτε ἀτρεμιζόντων. ταῦτα δ' ἐστὶ θεῖα, . . .*

¹² E. g., Plato, *Laws*, X, 899b; Aristotle, *On the Heaven*, 288a 4-5.

¹³ Pausanias, *Achaia*, XXIII, 7 (Pausanias, *Description of Greece*, with an English Translation by W. H. S. Jones, Loeb Class. Library, III, 1918, p. 309): . . . ὁ ἐγνωκέναι τὰ ἐς τὸ θεῖον ἔφασκε Φοίνικας τὰ τε ἄλλα Ἑλλήνων βέλτιον καὶ δὴ καὶ Ἀσκληπιῷ πατέρα μὲν σφᾶς Ἀπόλλωνα ἐπιφημίζειν, θνητὴν δὲ γυναῖκα οὐδεμίαν μητέρα. Ἀσκληπιὸν μὲν γὰρ ἀέρα γένει τε ἀνθρώπων εἶναι καὶ πᾶσιν ὁμοίως ζώοις ἐπιτήδειον πρὸς ὑγίειαν, Ἀπόλλωνα δὲ ἥλιον καὶ αὐτὸν ὀρθότατα Ἀσκληπιῷ πατέρα ἐπονομάζεσθαι, ὅτι ἐς τὸ ἀρμόζον ταῖς ὥραις ποιούμενος ὁ ἥλιος τὸν δρόμον μεταδίδωσι καὶ τῷ ἀέρι ὑγίειας . . . οὐδὲν δέ τι Φοινίκων μᾶλλον ἢ καὶ Ἑλλήνων ἔφην τὸν λόγον, ἐπεὶ καὶ ἐν Τιτάνῃ τῆς Σικωνίων τὸ αὐτὸ ἄγαλμα Ὑγίειαν τε ὀνομάζεσθαι καὶ . . . δῆλα ὡς τὸν ἡλιακὸν δρόμον ἐπὶ γῆς ὑγίειαν ποιοῦντα ἀνθρώποις. This opinion is the more important since Peripatos and Stoa had a conciliatory attitude toward common religion, the latter even trying to combine the popular belief with its philosophical theory. I am, however, only concerned with the problem of what Greek gods mean to the different periods and groups of men, not with the question of whether they were originally nature-gods or not.

If this is so, the adequate interpretation of the terminology used in Greek medicine becomes very difficult. In his book on the Sacred Disease the author employs nothing but the terms sun and cold and winds and no theological vocabulary whatsoever. It is only in the differentiation of his conception from that of the others that he refers to the elements as divine.¹⁴ Were it not for reasons of polemics, then,—that he wants to make clear his position against those who declare special diseases to be divine—he would scarcely even mention his belief in the divinity of the elements. Thus, natural and religious expressions are used as equivalents.¹⁵ Whether this is so or not, depends in every case on the philosophical and scientific outlook of the man who is writing.

As for dogmatic physicians of the Hellenistic schools the religious connotation of their words can safely be assumed. For they are more or less related to the Platonic, Aristotelian or Stoic philosophy. Only Empiricists and Methodists of those centuries can be said to think in purely natural terms. For they are followers of the new Academy or of the Pyrrhonean Scepticism. But what about the Hippocratic physicians whose philosophical standpoint is hardly known, what about the average physician who is a practitioner and not a trained scientist with a philosophical background?

The Hippocratic author, expressing his opinion that sun and cold and winds are divine, does not give any proof of his assumption. Apparently he is not concerned with objections which could be raised against such a belief. At first glance it seems to follow that he is making a statement generally accepted in his time. But no doubt, in the 5th and 4th centuries B. C., when this book and all the other Hippocratic writings were probably written, there were men who believed that the sun and moon and all the natural appearances are only corporeal bodies. To them the processes going on in the world are not influenced by God. This disbelief, as it is called by Plato,

¹⁴ Cp. 1; cp. 22.

¹⁵ Cf. Herodotus, II, ch. 24, where the author says in one statement (Herodotus, with an English Translation by A. D. Godley, Loeb Class. Library, I, 1926, p. 301, "During the winter the *sun* is driven by the storms from his customary course and passes over the inland parts of Libya. Now to make the shortest conclusion, that is all that need be said; for to whatever country this *God* is nearest, or over it, it is to be thought that that land is the thirstiest and that the rivers in it are diminished."

is widespread even in the 4th century B. C.¹⁶ At the same time, however, the average Greek, asked whether God exists or not, truthfully asserts the existence of the gods. He points to the evidence of the earth, the sun, moon, and stars as instances of deity and divinity. Concerning all the celestial phenomena, concerning the years and months and all the seasons, he does not deny that "all things are full of gods," as Thales said. According to him nobody is foolish enough to disregard this belief.¹⁷ In other words, the disbelief in the divinity of those powers of nature is restricted to a certain group of people, to the enlightened, but it is not at all self-evident nor is it the attitude of the average man. For this attitude is relatively new and rather suspicious: "The first man to put in writing the clearest and boldest of all doctrines (concerning the natural explanation of the phenomena) was Anaxagoras. But he was no ancient authority, nor was his doctrine in high repute. It was still under seal of secrecy, and made its way slowly among the few only, who received it with a certain caution rather than with implicit confidence. Men could not abide the natural philosophers and 'visionaries,' as they were then called, for that they reduced the divine agency down to irrational causes, blind forces, and necessary incidents."¹⁸ The Hippo-

¹⁶ Plato, *Laws*, X, 886e; *Sophistes*, 265c.

¹⁷ Plato, *Laws*, X, 886a; d/e; 899b/c. It is remarkable that Plato says, whether in earnest or in jest, that these theories are familiar in Athens but unknown in Crete (886b). They are certainly in contrast to the old religious attitude. For "it seems the first men in Greece thought those only to be gods whom many of the barbarians honour to-day—sun, moon, earth, stars and heaven." φαίνονται μοι οἱ πρῶτοι τῶν περὶ τὴν Ἑλλάδα τούτους μόνους τοὺς θεοὺς ἡγεῖσθαι οὕσπερ νῦν πολλοὶ τῶν βαρβάρων, ἥλιον καὶ σελήνην καὶ γῆν καὶ ἄστρον καὶ οὐρανόν. (Plato, *Cratylus* 397c).

¹⁸ Plutarch, *Nicias*, ch. 23 (Plutarch's *Lives*, with an English Translation by Bernadotte Perrin, Loeb Class. Library, III, 1915, p. 291): 'Ο γὰρ πρῶτος σαφέστατον τε πάντων καὶ θαρραλεώτατον περὶ σελήνης . . . λόγον εἰς γραφὴν καταθέμενος Ἀναξαγόρας οὐτ' αὐτὸς ἦν παλαιὸς οὔτε ὁ λόγος ἔνδοξος, ἀλλ' ἀπόρητος ἔτι καὶ δι' ὀλίγων καὶ μετ' εὐλαβείας τινὸς ἢ πίστεως βαδίζων. οὐ γὰρ ἡνείχοντο τοὺς φυσικοὺς καὶ μετεωρολόσχας τότε καλουμένους, ὥς εἰς αἰτίας ἀλόγους καὶ δυνάμεις ἀπρονοήτους καὶ κατηναγκασμένα πάθη διατρέβοντας τὸ θεῖον. The possible forerunners of this disbelief are discussed very briefly, its novelty being stressed also in Plato's *Laws*, X, 886c/d. I am well aware that Aristophanes (*Peace*, v. 410 sq.) says the Greeks are given into the hands of the barbarians because they do not sacrifice to sun and moon. But it is quite a different problem whether sacrifices were made to these powers or whether these phenomena were considered to be divine at that time. And certainly Socrates, a contemporary of Aristophanes, did not want to investigate the meteorological phenomena, because they are *divine*, but was interested in *human* things alone, namely in ethical problems (Xenophon, *Memorabilia*, I. 1. 12).

cratic author is quite right, then; his conviction does not need any detailed proof. For it is still more usual to understand the natural powers as divine than as merely natural; the opposite theory is the one which, in general, has to be demonstrated. It is the philosopher who must ascertain the divine character of the world against those thinkers who disagree with such an opinion; the ordinary man may still speak of it as carrying its own evidence.

From this fact it follows, of course, that in the Hippocratic writings one cannot possibly interpret all the natural terms as devoid of any religious meaning. It is not necessary to dwell on the fact that it is from the book on the Sacred Disease that the statement about the divinity of the natural quality derives, from this very enlightened and critical treatise as it is usually called.¹⁹ All the same, the assumption is justified. With the exception of a few books the Hippocratic writers in general do not renounce the divinity of nature, even if they do not mention it expressly. They are, apparently, not atheists, as they would have to be if they embraced the opposite theory.²⁰ Even less can it be assumed that the average physicians abandoned the old inherited belief in the divine character of sun and air and seasons. Their mental attitude was still nearer to that of the people who, unable to endure the atheistic philosophers, expelled them even from Athens,²¹ and who were always suspicious of the natural explanation of phenomena if it excluded the recognition of divine power. It is true that "it was not until later times that the radiant repute of Plato, because of the life the man led, and because he subjected the compulsions of the physical world to divine and more sovereign

¹⁹ Cf. e. g., U. v. Wilamowitz-Moellendorf, *Griech. Lesebuch*, I, 2, Text, Berlin, 1926, pp. 269-70: "Der aufgeklärte Arzt bekämpft die übernatürliche Natur der Krankheit . . . Aber nicht minder liegt dem Verfasser an der Einheitlichkeit der Naturauffassung, an der Wissenschaft, die auch für seine Beurteilung der Heiligen Krankheit massgebend ist." Cf. also Jones, *l. c.*, II, p. 129.

²⁰ The merely natural explanation of the heavenly bodies was reason enough for calling the philosophers atheists (Plato, *Laws*, XII, 967c). Yet, as far as I can see, there is no proof for Heidel's assumption that the physicians also are named in antiquity a godless crew, certainly not because of their attacks against magicians (cf. *Proceedings of the American Academy of Arts and Sciences*, Vol. XLV, 1910, Footnote 47).

²¹ Anaxagoras (Plutarch, *Pericles* ch. 32, *The Law of Diopeithes*); Protagoras (Sextus Empiricus, *adv. mathematicos* IX, 56); Diagoras (Aristophanes, *Birds*, v. 1073).

principles, took away the obloquy of such doctrines as these, and gave their science free course among all men.”²² For even in later centuries Epicureans were banished from the cities because of their atheism; throughout antiquity, the natural explanation of the world remained a bold venture. The average man recognized God’s ways in the movements of heavenly bodies and so, ordinarily, did the physician.²³ It is evident then, that all the external influences which are held responsible for the origin of diseases are in general not understood as merely natural. Sun and moon and stars and seasons are material to the modern mind but to the ancients they are gods.

Now the question arises as to how the explanation of illnesses by inner factors, by the nature of man or of diseases, an explanation very common in antiquity too, must be interpreted. In answering it a certain difficulty, noticeable, I think, in the whole discussion of the subject of my inquiry, will become even more striking. The Greeks speak of nature as do the moderns. But what they mean by it, as what they mean by all their notions of natural phenomena, is different from the modern conceptions which in their definite form always arise in the modern mind at the mention of the terms.^{23a} Nevertheless, only these words can be used; step by step the distinct features of the ancient thought must be described in these same terms. In order to avoid any misunderstanding of the statements, it is necessary therefore always to remain cognizant of this difference between ancient and modern terminology.

From the 5th century B. C. on nature was conceived as a mechanical or dynamic power of its own without any divine manifestation. It was defined in this way by the followers of the physiologists in the pre-Socratic centuries and in Plato’s time. Strato thought that nature, without the help of the gods, creates everything. The Epicu-

²² Plutarch, Nicias, ch. 23, l. c.: ὁψὲ δ’ ἡ Πλάτωνος ἐκλάψασα δόξα διὰ τὸν βίον τοῦ ἀνδρός, καὶ ὅτι ταῖς θέλαις καὶ κυριωτέραις ἀρχαῖς ὑπέταξε τὰς φυσικὰς ἀνάγκας, ἀφεῖλε τὴν τῶν λόγων τούτων διαβολήν, καὶ τοῖς μαθήμασιν εἰς ἅπαντας ὁδὸν ἐνέδωκεν.

²³ Cf. Jakob Burckhardt, Griech. Kulturgeschichte⁴, III, pp. 324 sq.; II, p. 216, and Plato (Laws, X, 888b-e) who contends that nobody is able to continue in his disbelief ‘till old age.’

^{23a} Not to mention the various meanings which the conception of nature had for the Greeks themselves; this problem cannot be dealt with here, cf. Heidel, l. c., pp. 95 sq.

reans, although believing in the existence of God, did not let him take part in the worldly processes. In the Academic philosophy nature was considered to be the necessity of movement; it was just in regard to diseases that such a conception was worked out most clearly.²⁴ Physicians imbued with those doctrines, then, cannot but contemplate the nature of man as devoid of God. Among the Hippocratic writers a few undoubtedly share such an opinion, the same ones who do not believe in the divinity of the elements. And the later Empiricists and Methodists do not recognize the divine impress of God either.

But certain as this is, the opinion that nature cannot be thought otherwise than as created and permeated by God is also to be found throughout antiquity. So it is said in the book on Airs, Waters, and Places: "I too think that these diseases are divine, and so are all others, no one being more divine or more human than any other; all are alike, and all divine, but each of them has a nature of its own, and none arises without its nature."²⁵ To this man, the distinction between divine and human and the different estimation of these two powers become meaningless because everything is equally divine. This does not imply that God acts directly and is responsible, by reason of His personal interference, for the single event. Such a possibility is expressly excluded. The individual disease has a nature of its own, but by this term its divine character is only expressed in another form; it is not done away with by being explained through nature. Individual nature therefore, since it does not contradict God, but is rather His essence, must be apprehended as created by God and as divine in itself. This conviction is expressed also in the Hippocratic book on Regimen: "The nature of all things was arranged by the gods," and "all the things take place . . . through a divine necessity."²⁶ In the same way nature is thought of later.

²⁴ Concerning the physiologists cf. Plato, *Laws*, X, 889b; *Sophistes* 265c and Plutarch, *De defectu oraculorum*, 436d. Concerning Strato, cf. Cicero, *Academica*, II, 38, 121; *De natura deorum*, I, 13, 35; concerning the Academy cf. *De natura deorum*, III, 25, 65; 11, 27; 10, 24.

²⁵ Jones, l. c., I, p. 127 (slightly altered): *ἐμοὶ δὲ καὶ αὐτῷ δοκεῖ ταῦτα τὰ πάθεα θεῖα εἶναι καὶ τᾶλλα πάντα καὶ οὐδὲν ἕτερον ἑτέρου θειότερον οὐδὲ ἀνθρωπινώτερον, ἀλλὰ πάντα ὁμοῖα καὶ πάντα θεῖα. ἕκαστον δὲ αὐτῶν ἔχει φύσιν τὴν ἑωυτοῦ καὶ οὐδὲν ἄνευ φύσιος γίνεταί.*

²⁶ Jones, l. c., IV, pp. 249-51: *φύσιν δὲ πάντων θεοὶ διεκόσμησαν. 237: πάντα γίνεταί δι' ἀνάγκην θείην.*

It is divine to the Platonic physician; to the Aristotelian physician it is at least demonic, the divine not being realized in an absolute degree.²⁷ The Stoic physician must find God everywhere in nature; for nature is identical with God; these are only different terms.²⁸ While there is a tendency to understand nature without referring to divine power, a more theological tendency also exists, nay even prevails, in antiquity.

This theological conception, however, seems to a certain extent self-contradictory. In the theory of the Hippocratic physicians rationalism and belief are interwoven with each other, naturalism and theology are combined into a unity; the same is valid for the ideas of the later physicians. Everything is natural, but in being so, it is divine too, or to use another phrase it is supernatural; and proof of this is found in reasoning. The modern logical objection to such a theory apparently did not occur to the ancient mind; indeed, there was no opposition between God and nature.²⁹ At any rate, it seems impossible to contend that every form of supernaturalism was rejected by the Hippocratic physicians. On the contrary, they as scientists embraced a supernatural dogma.³⁰ Equally unfounded, I believe, is the statement that the gods were not dethroned by these men, yet that nothing was left to them but "the sole rôle of first cause in the physical world."³¹ God is indeed deprived of any direct

²⁷ Concerning Plato, cf. e. g., *Sophistes* 265c; concerning Aristotle, cf. E. Zeller, *Die Philosophie d. Griechen*, II, 2³, 1879, pp. 330 sq.

²⁸ Cf. e. g., Diels, *Doxographi Graeci*, 322b9-12.

²⁹ One is reminded of the most significant metaphysical idea of the 17th century which is characterized by Dilthey as "Halbheit des rationalen Supranaturalismus; Kompromiss zwischen Dogmenglaube und Vernunftwissenschaft." (*Die Autonomie des Denkens im 17. Jahrhundert*, *Gesammelte Schriften*, II, 1929, p. 283). In spite of all the divergence caused by the Christian conception of divine revelation the attitude of that time, as far as I can judge, is best compared with that of the Greeks.

³⁰ Th. Gomperz, *Griech. Denker*⁴, I, 1922, p. 257, says, "Mit ausserordentlicher Schärfe wird aber allem Supranaturalismus in zwei Erzeugnissen der Hippokratischen Schule (sc. the book on Water, Air and Places and the book on the Sacred Disease) der Krieg erklärt," although he admits that, according to the writers, "strenges Festhalten an ausnahmsloser Gesetzmässigkeit alles Naturgeschehens mit dem religiösen Glauben an einen göttlichen Urquell, aus dem im letzten Grunde eben dieses Naturgeschehen fiesse, vollkommen vereinbar sei." (p. 258). Concerning the book on the Sacred Disease and its attitude cf. pp. 212-13.

³¹ W. H. Heidel, *The Heroic Age of Science*, 1933, p. 21. He recognizes that Greek science is not irreligious (p. 17) but the men of science maintain a common-

and special interference; he is not supposed to act arbitrarily. But what he loses on one side, he gains on the other: everything, being a natural event, is divine.

This theory of supernaturalism does not go uncontested even in the Hippocratic writings. The divine influence is still recognized, but it is understood to be only one factor just as is nature which is a power of its own. So the author of the book on the Sacred Disease says: "This disease is not in my opinion any more divine or more sacred than other diseases, but has its nature and origin."³² And the same is repeated with the addition that the "origin of this disease, like that of other diseases, lies in heredity," that "the cause of this affection, as of the more serious illnesses generally, is the brain."³³ The conclusion is that "there is no need to put the disease in a special class and to consider it more divine than the others; they are all divine and all human. Each has a nature and power of its own."³⁴ What does this mean? It means that all diseases are divine

sense attitude toward life (p. 20); for the time being the gods seem to be virtually excluded from the world of nature; so far as they receive a place in it, they find it under the shadow of Law or Custom (p. 21). Heidel who stresses so much the importance of Greek medicine for the study of Greek science does not refer to the author of the book on Regimen as a physician, but only as an intellectual leader (p. 21); this invalidates his argument concerning medicine. Almost all the more important Hippocratic books recognize the gods as a real factor in nature. It is impossible here to deal with every one of them. I need only refer to the book on Flesh in which the power of thinking is ascribed to warmth. The author apparently agrees with Diogenes of Apollonia (cf. K. Deichgräber, *Hippokrates über Entstehung u. Aufbau d. menschlichen Körpers*, 1935, p. 2, 10-14). Diogenes did not only expound the theological aspect, he bitterly opposed, as he had to, the physiologists, those men who thought they could explain everything by nature devoid of the divine spirit. In attacking them he maintains that the power of God creates the world, as Plato says (cf. *Sophistes* 265c). This, by the way, proves that the expression *τῆς φύσιος τὴν ἀνάγκην* cannot be understood as purely mechanical (contrary to Heidel, *Proceedings*, 1. c., p. 100, 81), but it is rather to be understood in the sense of the book on Regimen. It is interesting that from the 16th century on some interpreters of Hippocrates refer to the book on Flesh if they want to prove the religiosity of the great physician (cf. Deichgräber, 1. c., pp. 56 sq.).

³² Jones, 1. c., II, p. 139 (slightly altered): οὐδὲν τί μοι δοκεῖ τῶν ἄλλων θειοτέρη εἶναι νούσων οὐδὲ ἱερωτέρη, ἀλλὰ φύσιν μὲν ἔχει καὶ πρόφασιν.

³³ Jones, 1. c., II, p. 151: ἄρχεται δὲ ὥσπερ καὶ τᾶλλα νοσήματα κατὰ γένος. 153: Ἀλλὰ γὰρ αἷτιος ὁ ἐγκέφαλος τούτου τοῦ πάθεος, ὥσπερ καὶ τῶν ἄλλων νοσημάτων τῶν μεγίστων.

³⁴ Jones, 1. c., II, 183: ὥστε μηδὲν δεῖ ἀποκρίνοντα τὸ νόσημα θειότερον τῶν λοιπῶν νομίσαι, ἀλλὰ πάντα θεῖα καὶ πάντα ἀνθρώπινα. φύσιν δὲ ἕκαστον ἔχει καὶ δύναμιν ἐφ' ἐωυτοῦ.

in so far as they are caused by sun and air and winds which are divine, as had been said before. They are human, apparently because they have their origin in heredity, in the organs of the body. It is impossible to admit the divinity of a special disease, for they are all divine; at the same time all diseases are human because of the influence of the body. The two spheres of the divine and of the natural are then fundamentally separate, although their influence is combined in every action.³⁵

A similar theory has to be presupposed for the book on Prognostics. At the outset the physician is advised "to learn the natures of such diseases, how much they exceed the strength of men's bodies, besides whether there is any divine influence in them and to learn how to forecast them."³⁶ Divine influence and human nature again are separated as distinct forces. The nature of man is not in itself divine but the divine is thought to become apparent in the body. In what way this must be understood was already discussed in antiquity; the interpretations varied widely.³⁷ It seems to me that it is the

³⁵ Jones, l. c., I, p. x, without reference but, I think, mindful of these passages, says: "The 5th century B. C. witnessed the supreme effort of the Greeks to cast aside this incubus in all spheres of thought. They came to realize that to attribute an event to the action of a god leaves us just where we were, and that to call normal phenomena natural and abnormal divine is to introduce an unscientific dualism, in that what is divine (because mysterious) in one generation may be natural (because understood) in the next, while, on the other hand, however fully we may understand a phenomenon, there must always be a mysterious and unexplained element in it. All phenomena are equally divine and equally natural." This statement, I think, is not in accordance with the meaning of the Hippocratic author, as I tried to explain it. Everything is understood, even though it be in the form of a divine causality. On the other hand, the main theme of the book is not the uniformity of Nature, every aspect of which is equally divine (Jones, l. c., II, p. 135). It also follows from my interpretation that there is a difference in the basic theory between the book on the Sacred Disease and the book on Water, Air, and Places (contrary to Jones, l. c., II, pp. 130/1). Furthermore the thesis of Gomperz that the Hippocratic physicians rejected the belief in supernatural forces can certainly not be proved by the statement of this treatise; cf. p. 211, 30.

³⁶ Jones, l. c., II, pp. 6-8: *γινῶναι οὖν χρὴ τῶν τοιούτων νοσημάτων τὰς φύσις, ὁκόσον ὑπὲρ τὴν δύναμιν εἰσιν τῶν σωμάτων ἅμα δὲ καὶ εἴ τι θεῖον ἔνεστιν ἐν τῇσι νούσοισι*. Following the edition of Kühlewein, Jones omits the words concerning the divine, but they are contained in all the manuscripts. Cf. also Hippocrates, ed. Littré, VII, 1851, p. 312.

³⁷ Galeni in Hippocratis Prognosticum, ed. I. Heeg, CMG, V, 9, 2, 1915, p. 205, 28 sq. Erotiani Vocum Hippocraticarum Collectio cum Fragmentis, rec. E. Nachmanson, 1918, p. 108, 10 sq.

spontaneous reactions which are signified by the word 'divine.' In one of the Hippocratic books it is stated: "In fact it is especially knowledge of the gods that by medicine is woven into the stuff of the mind . . . Physicians have given place to the gods. For in medicine that which is powerful is not in excess. In fact, though physicians take many things in hand, many diseases are also overcome for them spontaneously."³⁸ The physicians then make room for the gods in regard to the spontaneous reactions of the body which are considered as an interference of divine character, since they cannot be mastered by the human being. This is a theory unfamiliar neither to the 5th and 4th centuries B. C. nor to the later periods. Aristotle says: "There are a few to whom it seems that chance is a cause, but that it is not evident to human intelligence, since it is something divine and marvelous."³⁹ It is in this sense that the statement in this Hippocratic book and in the others can best be interpreted. The spontaneous reactions which are not the effects of human efforts and which can only be acknowledged as facts, are mentioned very often in the book on Prognostics as well as in the book on the Diseases of Women, the author of which states that the physician has first of all to consider the possible divine influence, then the nature of women, and many other things.⁴⁰ At any rate, many of the Hippocratic books, a greater number than identify God with nature, acknowledge the divine as a factor apart from nature which is a power of its own.

³⁸ Jones, l. c., II, p. 289: *Καὶ γὰρ μάλιστα ἡ περὶ θεῶν εἵδησις ἐν νόῳ αὐτῇ ἐμπλέκεται. οἱ δὲ ἰητροὶ θεοῖσι παρακεχωρήκασιν. οὐ γὰρ ἐνὶ περιττὸν ἐν αὐτῇ τὸ δυναστεῦν. καὶ γὰρ οὗτοι πολλὰ μὲν μεταχειρόνται, πολλὰ δὲ καὶ κεκράτῃται αὐτοῖσι δι' ἐωντῶν.*

³⁹ Aristotle, Physics, 196b, 5-7: *εἰσὶ δὲ τινες οἷς δοκεῖ εἶναι αἰτία μὲν ἡ τύχη, ἄδηλος δὲ ἀνθρωπίνῃ διανοίᾳ ὥς θεῖόν τι οὔσα καὶ δαιμονιώτερον.* Cf. Aristotle, The Physics, with an English Translation by P. H. Wicksteed and F. M. Cornford (Loeb Class. Library), Vol. I, 1929, pp. 146-7 where the parallels are quoted. Chance in the Aristotelian discussion is identical with spontaneity, cf. l. c., p. 120.

⁴⁰ E. Littré, Oeuvres complètes d'Hippocrate, VII, 1851, p. 312: *περὶ δὲ τῆς γυναικείης φύσεως καὶ νοσημάτων τάδε λέγω. μάλιστα μὲν τὸ θεῖον ἐν τοῖσι ἀνθρώποισι αἴτιον εἶναι. ἔπειτα αἱ φύσεις τῶν γυναικῶν καὶ χροαί.* Heidel, The Heroic Age of Science, p. 18, characterizes this statement as the sort of curt remark that "one might perhaps expect to find in an unbelieving modern who wished to avoid offending sensibilities he respected but did not share." He points to the fact that later the divine does not occur, and this would be indeed an objection, as is already remarked by Galen (l. c., p. 208, 4-8). If one adopts the explanation I propose this objection is no longer valid, and the statement, obviously important, can be given its full value. Cf. also Hippocrates, ed. Littré, IX, 1861, p. 26; 28.

No doubt in some treatises God is even entirely excluded from the bodily processes. For in the 5th and 4th centuries B. C. there are many people who believe in the mechanism of the nature of plants, animals, and human beings: "Nature produces them out of a certain spontaneous cause and without any creative intelligence."⁴¹ This, I think, is even the more common attitude at this time. For the deification of the individual organism is a modern and advanced idea in these centuries, one that is not yet generally accepted. Only a few individuals already visualize that "all things were arranged in the body, in a fashion conformable to itself, by fire, a copy of the whole, the small after the manner of the great and the great after the manner of the small."⁴² And they are physicians. But others, just because they adore God, are aware of the contrast between Him and man, "the one being utterly corrupt, the other being perfectly holy."⁴³ They are physicians, too.

That the nature of everything is divine, that every process can only be understood as regulated by divine agency, is a conception which becomes current among men only in later times through Platonic, Aristotelian, and Stoic philosophy. It is, however, of the greatest importance that from the Hellenistic period on the religious rationalism is accepted by more and more scientists. For the mechanical and irreligious philosophy and science degenerated into avowed skepticism. The Epicureans do not care for a single and uniform explanation of the phenomena; they rejoice in manifold causes of the same event. The Empiricists refuse to explain anything because the human intellect cannot judge the causes and can discover only the proximate conditions. The Methodists deal only with the phenomena without considering causation at all. Scientific inquiry is restricted to dogmatic philosophers and scientists who alone feel able to determine the causes and are interested in the understanding of facts. Galen says in his book on the Use of the Parts that "this is a sacred book which I composed as a true hymn of the God who

⁴¹ Plato, *Sophistes* 265c: τὴν φύσιν αὐτὰ γεννᾶν ἀπὸ τινος αἰτίας αὐτομάτης καὶ ἄνευ διανοίας φυοῦσης.

⁴² Jones, l. c., IV, p. 247: πάντα διεκοσμήσατο κατὰ τρόπον αὐτὸ ἐωυτῷ τὰ ἐν τῷ σώματι τὸ πῦρ, ἀπομίμησιν τοῦ ὅλου, μικρὰ πρὸς μεγάλα καὶ μεγάλα πρὸς μικρά.

⁴³ Jones, l. c., II, p. 149: οὐ μέντοι ἔγωγε ἀξιῶ ὑπὸ θεοῦ ἀνθρώπου σῶμα μιλνεσθαι, τὸ ἐπικηρότατον ὑπὸ τοῦ ἀγνοτάτου.

has created us, in the belief that I am really pious not if I sacrifice many hecatombs of oxen to Him and burn thousands of talents of cassia, but if I first recognize myself and then explain also to the others the wisdom of God, His power, His excellence.”⁴⁴ This statement is significant. The fact that Platonic, dogmatic philosophy recognizes the power of God in nature does not mean the end of science, it is rather the stimulus to perfection of scientific knowledge and empirical understanding. If God did not exist, the world would be governed by chance alone but not by intelligible laws or recognizable causation. Moreover, nature separated from God would not be capable of inspiring in man enthusiasm for scientific investigation. Dogmatic philosophy alone leads the philosopher to an understanding of the phenomena and the physician to an explanation of diseases by sun and air or by the nature of the body.

These considerations in themselves suggest that a belief according to which diseases are caused by demons can not have had great bearing on Greek medicine. As a matter of fact there is, throughout antiquity, hardly one physician who accepts such a theory. The author of the book on the Sacred Disease, bitterly attacking those who trace epilepsy to the direct influence of a God or demon, does not give any indication that this opinion was held by physicians. He says that “those [men] who first attributed a sacred character to this malady were the same men who do it to-day, magicians, purifiers, charlatans and quacks.”⁴⁵ A real physician apparently explained not even this disease by demons. The same thing is true of the 4th century A. D. when the physician Posidonius, very famous for his medical skill, is said to have denied that mania could be caused by a demon. There is no reason to suppose that this is a very unusual

⁴⁴ Galeni, *De Usu partium*, III, 10, ed. G. Helmreich, I, 1907, p. 174, 6-13: *ιερόν λόγον δν ἐγὼ τοῦ δημιουργήσαντος ἡμᾶς ὕμνον ἀληθινὸν συντίθημι, καὶ νομίζω τοῦτ' εἶναι τὴν ὄντως εὐσέβειαν, οὐχὶ εἰ ταύρων ἑκατόμβας αὐτῷ παμπολλὰς καταθύσαιμι καὶ τάλαντα μυρία θυμιάσαιμι κασίας, ἀλλ' εἰ γνοίην μὲν αὐτὸς πρῶτος, ἔπειτα δὲ καὶ τοῖς ἄλλοις ἐξηγησαίμην οἷος μὲν ἐστὶ τὴν σοφίαν, οἷος δὲ τὴν δύναμιν, ὁποῖος δὲ τὴν χρηστότητα.*

⁴⁵ Jones, l. c., II, p. 141 (slightly altered): *δοκέουσιν οἱ πρῶτοι τοῦτο τὸ νόσημα ιερῶσαντες τοιοῦτοι εἶναι ἄνθρωποι οἷοι καὶ νῦν εἰσι μάγοι τε καὶ καθάρται καὶ ἀγύρται καὶ ἀλαζόνες.* Cf. *On the Diseases of Girls* (*Περὶ παρθενίων*), Hippocrates ed. Littré, VIII, 1853, p. 468.

attitude; for the same opinion is expressed in Stephanus' Commentary to the Prognostics of Hippocrates.⁴⁶ And even in the 7th century A. D. physicians, it seems to me, no less than laymen, are convinced of the natural character of mental illnesses although at that time the demonological explanation is more and more emphasized.⁴⁷ And yet, concerning those affections the problem is at least thoroughly discussed in medical books, whereas in regard to the other diseases and their causation by the wrath of God or evil spirits, with the exception of a few places, the subject is not even mentioned in Greek medicine. Some commentators note that, in Hippocrates' Prognostic, the word divine might be understood as pestilence since "this affliction seems to be caused by God."⁴⁸ Galen, dealing with the same term, remarks that "a few believe illness could afflict men also through a certain wrath of the gods and that they try to prove this opinion quoting the authors of the so-called irrational stories."⁴⁹ Whether Galen is thinking of physicians or only of laymen, whether these people explain mental diseases alone in this way or other illnesses too, cannot be ascertained beyond a doubt. These are, how-

⁴⁶ On Posidonius cf. Philostorgius, Ecclesiastical History, VIII, 10 (GSS Philostorgius, p. 111, 12 sq. Bidez). Stephanus in Scholia in Hippocratem et Galenum, ed. F. R. Dietz, I, 1834, pp. 71 sq. Dölger (Antike u. Christentum IV, 1934, p. 106) assumes that the explanation of Posidonius is not a common one. He himself remarks that Origines attacks physicians who explain mental diseases in a natural way (l. c., p. 96).

⁴⁷ Sophronius Cyri et Joannis miracula, c. 54, Migne PG, 87, 3, 3624, says: τοῦτον δοκίμοις ἰατροῖς ὑπεδείκνυν, ἀπὸ πλήθους μελαγχολικῶν χυμῶν τὰς συνεχεῖς ἐπιληψίας ἐκείνας καὶ μακρὰς καρηβαρείας συμβαίνειν οἰόμενοι· ἑκατέρας γὰρ ὡς ἔγνωμεν ἔπασχεν, τὰς μὲν συνεχέστερον, τὰς δὲ ἐντονώτερον καὶ μακρότερον: ἀλλ' ὡς μίαν πρὸς πάντων ἀπόφασιν ἤκουον ἀνθρώποις ἀνίκητον εἶναι τὸ νόσημα, πνεῦμα πονηρὸν καὶ οὐ μελαγχολικὸν χυμὸν ἔχων τὸ νόσημα. Certainly the physicians do not know in this case how to cure the disease; this however they sometimes do not know in the 5th century B. C. either. Apparently the Christian book wants to use the authority of the physicians as proof for the healing-power of the Saints and does not describe the actual situation correctly. Otherwise it would be hard to reconcile that the laymen originally believed in the natural character of epilepsy, yet, that the physicians are said not to have been of the same opinion.

⁴⁸ Erotian, ed. Nachmanson, l. c., p. 108, 18-19: διὰ τὸ τοὺς λοιμοὺς ἐκ θεοῦ δοκεῖν εἶναι.

⁴⁹ Galen, In Hippocratis' Prognostic, l. c., p. 206, 3-5: ἔνιοι μὲν γὰρ οἶονται καὶ διὰ θεῶν τινα ὀργὴν γίνεσθαι τοῖς ἀνθρώποις νοσήματα καὶ λέγουσιν γε μαρτυρίαν τῆς δόξης ταύτης παρὰ τῶν γραψάντων τὰς καλουμένας ιστορίας ἄνευ λόγου. Cf. also Celsus, CML, I, 1915, p. 17, 15-16: Eodem vero auctore [sc. Homero] disci potest morbosum (!) ad iram deorum immortalium relatos esse.

ever, the only instances to be found in the works of Hippocrates and Galen and of the other medical writers. One is justified, then, in saying not only that the Greek physicians rejected the explanation by demonology but also that they did not take it seriously; that they treated the subject as negligible.

This attitude of the physicians is not an isolated one. The ancient philosophers also unanimously disagreed with the belief that diseases could be caused by demons. Not in Platonic or Aristotelian or Stoic philosophy, still less, of course, in the Scepticism are the demons held responsible for illness. Again the problem is scarcely mentioned; it seems unnecessary to deal with it very thoroughly.⁵⁰ Also the Neo-Platonists disregard such a theory. Plotinus says: "They tell us they can free themselves of diseases. If they meant, by temperate living and an appropriate regime, they would be right and in accordance with all sound knowledge. But they assert diseases to be Spirit-Beings and boast of being able to expell them by formulae: this pretention may enhance their importance with the crowd, gaping upon the powers of magicians; but they can never persuade the intelligent that disease arises otherwise than from such causes as overstrain, excess, deficiency, putrid decay, in a word some variation whether from within or from without. The nature of illness is indicated by its very cure. A motion, a medicine, the letting of blood, and the disease shifts down and away; sometimes scantiness of nourishment restores the system: presumably the Spiritual power gets hungry or is debilitated by the purge. Either this Spirit makes a hasty exit or it remains within. If it stays, how does the disease disappear, with the cause still present? If it quits the place, what has driven it out? Has anything happened to it? Are we to suppose it throve on the disease? In that case the disease existed as something distinct from the Spirit-Power. Then again, if it steps in where no cause of sickness exists, why should there be anything else

⁵⁰ One usually refers to Plato's *Phaedrus*, 244d, in order to prove that Plato, at least, explained diseases by the interference of God. But he is only speaking of mania, one of the gravest diseases and burdens, which, in this myth, he traces back to a kind of divine possession like the gift of prophecy and poetry. For Plato's theory on diseases, even on mental diseases, cf. *Timaeus*, 81e-86b. For the Stoics' cf. Diogenes Laertius, VII, 158. The Neo-Pythagoreans are the only philosophical sect of late antiquity which recognizes at least purifications (cf. Diogenes Laertius, VIII, 33).

but illness? If there must be such a cause, the Spirit is unnecessary: that cause is sufficient to produce that fever. As for the notion, that just when the cause presents itself, the watchful Spirit leaps to incorporate itself with it, this is simply amusing.”⁵¹ This statement proves that even the latest philosophical system of antiquity, the one which is generally held responsible for so much superstition of the ancients, rejected the demonological explanation of diseases categorically. At the same time the polemic of Plotinus shows that the Gnostic philosophy did accept such a doctrine of causation, a philosophy which combined Greek ideas with Christian religion. It is the Christians and the Jews who propagated these ideas at the end of Greek and Roman history as the Persians and Chaldeans had done in the very beginning.⁵²

⁵¹ Plotinus, *Psychic and Physical Treatises*; Comprising the Second and Third Enneades, Translated from the Greek by S. Mackenna, London 1921, Vol. II, p. 235. (Plotin., *Enneades* II, 9, 14): *καθαίρεσθαι δὲ νόσων λέγοντες αὐτοὺς λέγοντες μὲν ἂν σωφροσύνη καὶ κοσμία διαίτη ἔλεγον ἂν ὀρθῶς, καθάπερ οἱ φιλόσοφοι λέγουσι. νῦν δὲ ὑποστησάμενοι τὰς νόσους δαιμόνια εἶναι καὶ ταῦτα ἐξαιρεῖν λόγῳ φάσκοντες δύνασθαι καὶ ἐπαγγελλόμενοι σεμνότεροι μὲν ἂν εἶναι δόξαιεν παρὰ τοῖς πολλοῖς, οἳ τὰς παρὰ τοῖς μάγοις δυνάμεις θαυμάζουσι τοὺς μέντοι εὖ φρονοῦντας οὐκ ἂν πείθοιεν, ὥς οὐχ αἱ νόσοι τὰς αἰτίας ἔχουσιν ἢ καμάτοις ἢ πλησμοναῖς ἢ ἐνδείαις ἢ σήψεσι καὶ ὅλως μεταβολαῖς ἢ ἔξωθεν τὴν ἀρχὴν ἢ ἐνδοθεν λαβούσαις. δηλοῦσι δὲ καὶ αἱ θεραπείαι αὐτῶν. γαστρὸς γὰρ ῥύεψης ἢ φαρμάκου δοθέντος διεχώρησε κάτω εἰς τὸ ἔξω τὸ νόσημα καὶ αἷματος ἀφηρεμένου, καὶ ἐνδεια δὲ ἰάσατο, ἢ πεινήσαντος τήκεσθαι, ποτὲ δὲ ἀθρόως ἐξεληθόντος, ἢ μένοντος ἐνδον. ἀλλ’ εἰ μὲν ἔτι μένοντος, πῶς ἐνδον ὄντος οὐ νοσεῖ ἔτι; εἰ δὲ ἐξελήλυθε, διὰ τί; τί γὰρ αὐτὸ πέπονθεν; ἢ ὅτι ἐτρέφετο ὑπὸ τῆς νόσου: ἦν ἄρα ἡ νόσος ἑτέρα οὕσα τοῦ δαίμονος. ἔπειτα, εἰ οὐδένδς ὄντος αἰτίου εἴσεισι, διὰ τί οὐκ ἀεὶ νοσεῖ; εἰ δὲ γενομένου αἰτίου, τί δεῖ τοῦ δαίμονος πρὸς τὸ νοσεῖν; τὸ γὰρ αἷτιον τὸν πυρετὸν αὐταρκὲς ἐστὶν ἐργάσασθαι. γελοῖον δὲ τὸ ἅμα τὸ αἷτιον γενέσθαι καὶ εὐθέως ὥσπερ παρυσποστῆναι τῷ αἰτίῳ τὸ δαιμόνιον ἔτοιμον ὄν.*

⁵² Concerning the early Christian attitude toward diseases, cf. A. Harnack, *Medizinisches aus der ältesten Kirchengeschichte*, 1892, pp. 71 sq. The Jewish belief is most clearly formulated by Josephus, *Antiquitates*, VIII, 2, 5. Already Pliny traces the origin of magic back to Persians and Chaldeans on the one hand, to the Jews on the other. (*Natural History*, introduction to book XXX). The modern attempt to find magic in all centuries of Greek history is not convincing. Hopfner, (*Realenzyklopädie d. klass. Altertumswiss.*, XIV, 1, pp. 301 sq., s. v. *Mageia*) collects the whole material; his survey only serves to prove that before the 3rd century B. C. magic is not an important factor in Greek life. I do not presume to decide whether the situation was always different from that which is to be found in other countries and in primitive men, as Ed. Meyer assumes (*Gesch. d. Altertums*, I, 1⁵, pp. 93 sq.). So much is certain, that in Greece magic is revived only under foreign influences in later times (cf. Ed. Meyer, *l. c.*, p. 98). Cf. Lucian's *Tragopodagra*, v. 265 sq. *Σύροι μὲν ἔσμεν, ἐκ Δαμασκοῦ τῷ γένει.*

It is certain that philosophers and physicians do not believe demons to be the cause of disease. Not only is the scientific theory hostile to such an opinion,—this would explain only the attitude of the trained physicians, of the followers of the various medical schools—even the average educated man did not believe in the demonic character of diseases; his behavior as a patient was conditioned by this attitude. Modern interpretation is inclined more and more to claim that Greeks and Romans, in general, traced back the origin of diseases to possession by demons.⁵³ If this were correct, a queer contradiction of the data would arise. For these men are supposed to be the patients of physicians who apparently do not believe in demons, who do not even try to prove that in a special case it is the body and not a demon which has brought about the illness. Or did people call in only those unknown practitioners who did themselves believe in demons? But no physician could afford to do this. If the illness was caused by a demon, nothing could be done by the doctor. He must retire and give way to the magician. In such a case “he is expelled from the house” and the patient will say: “Oh, sir, leave me to pay my penalty, impious wretch that I am, accursed and hateful to the gods and all the heavenly host.”⁵⁴ After all, the physicians had patients; people must have thought them able to do something. The natural explanation of diseases must have been generally accepted.

The reasons for this acceptance can be ascertained by inquiring into the causes for the rejection of a demonological interpretation of disease. It is the author of the book on the Sacred Disease who says of the assumptions of the magicians that they “show, not piety, as they think, but impiety rather, implying that the gods do not exist, and what they call piety and the divine is, as I shall prove, impious

⁵³ The modern interpretation is to be found in the article on Demons, RE, Supplement III, p. 267 sq.; p. 272, 38; cf. also Halliday, l. c., p. 281; E. Stemplinger, Sympathiegläubige u. Sympathiekuren in Altertum u. Neuzeit, 1919, p. 5: “So ist das ganze Griechisch-Römische Altertum trotz Hippokrates erfüllt von dem Glauben an den Krankheitsdämon.” The argument in these books is usually based on passages taken from poetry which cannot be acknowledged as the only and adequate instance in this problem. Moreover, it is again the mental diseases to which those passages mostly refer, and here the problem is a peculiar one, cf. pp. 216-17.

⁵⁴ Plutarch, On Superstition (Plutarch's *Moralia*, with an English Translation by F. C. Babbitt, Loeb Class. Library, II, 1928, p. 475): *ἔα με, ἄνθρωπε, δίδόναι δίκην, τὸν ἀσεβῆ, τὸν ἐπάρατον, τὸν θεοῖς καὶ δαίμοσι μεμισσημένον*. Cf. also Lucian, *Philopseudes*, 36.

and unholy.”⁵⁵ The physicians then not only believe that they can explain diseases in another and more scientific way. They rely also on religious argumentation. For they hold “that a man’s body is not defiled by God, the one being utterly corrupt, the other perfectly holy.”⁵⁶ In slightly different terms Posidonius says the same thing in the 4th century A. D.: “men do not become ill through the affliction of demons . . . for it is not at all in the power of the demons to afflict the nature of men.”⁵⁷ A god cannot pollute or possess the human body. The physicians apparently subscribe to the Platonic saying: “It is good since it comes into being by divine destiny.”⁵⁸ In this way they adopt the Olympian religion and reject the chthonic cults; they adopt the pious reverence of the gods and reject purifications.

From the aspect of such a belief in antiquity, too, all magical rites are superstitious, as is revealed by Plutarch’s discussion of superstition: “In the estimation of the superstitious man, [all the indispositions] of his body . . . are classed as afflictions of God or attacks of an evil spirit. For this reason he has no heart to relieve the situation or undo its effects, or to find some remedy for it, or to take a strong stand against it lest he seem to fight against God and to rebel at his punishment.”⁵⁹ Superstitious as this man is, he will use only rites and purifications, in contrast to the atheist who “when he is ill, takes into account and calls to mind the times when he has eaten too much or drunk too much wine, also irregularities in his daily life, or instances of over-fatigue or unaccustomed changes of air or locality.”⁶⁰

⁵⁵ Jones, l. c., II, p. 145: *καίτοι ἔμοιγε οὐ περὶ εὐσεβείης τοὺς λόγους δοκέουσι ποιεῖσθαι, ὡς οἴονται, ἀλλὰ περὶ ἀσεβείης μᾶλλον, καὶ ὡς οἱ θεοὶ οὐκ εἰσὶ, τὸ δὲ εὐσεβὲς αὐτῶν καὶ τὸ θεῖον ἀσεβές ἐστι καὶ ἀνόσιον, ὡς ἐγὼ διδάξω.*

⁵⁶ Jones, l. c., II, p. 149, cf. p. 215, 43.

⁵⁷ Philostorgius, l. c.: *θεάσασθαι δὲ τὸν Ποσειδώνιον ἐν ἰατρικῇ διαπρέποντα. λέγειν δ’ αὐτὸν ὅμως οὐκ ὀρθῶς οὐχὶ δαιμόνων ἐπιθέσει τοὺς ἀνθρώπους ἐκβακχεύεσθαι, ὑγρῶν δὲ τινῶν κακοχυμίαν τὸ πάθος ἐργάζεσθαι· μηδὲ γὰρ εἶναι τὸ παράπαν ἰσχὺν δαιμόνων ἀνθρώπων φύσιν ἐτηρεάζουσιν.*

⁵⁸ Plato, Phaedrus 244 c.: *ὡς καλοῦ ὄντος, ὅταν θείᾳ μοίρᾳ γίγνηται.*

⁵⁹ Plutarch, On superstition, l. c., II, p. 475: *τῷ δὲ δεισιδαίμονι καὶ σώματος ἀρρωστία πᾶσα καὶ . . . πληγαὶ θεοῦ καὶ προσβολαὶ δαίμονος λέγονται. ὅθεν οὐδὲ τολμᾷ βοηθεῖν οὐδὲ διαλύειν τὸ συμβεβηκὸς οὐδὲ θεραπεύειν οὐδ’ ἀντιτάττεσθαι, μὴ δόξῃ θεομαχεῖν καὶ ἀντιτείνειν κολαζόμενος.*

⁶⁰ Plutarch, On superstition, l. c., II, p. 473: *Νοσῶν θ’ ὁ ἄθεος ἐκλογίζεται καὶ ἀναμιμνήσκειται πλησμονὰς αὐτοῦ καὶ οἰνώσεις καὶ ἀταξίας περὶ δίαιταν ἢ κόπους ὑπερ-*

For the Romans, too, the use of purification—the explanation of diseases by demons or gods—is superstition. It is Pliny who says: “To believe that there are a number of gods derived from the virtues and vices of man . . . indicates still greater folly. Human nature, weak and frail as it is, mindful of its own infirmity, has made these divisions, so that every one might have recourse to that which he supposed himself to stand more particularly in need of. Hence we find different names employed by different nations; the inferior deities are arranged in classes, and diseases and plagues are deified, in consequence of our anxious wish to propitiate them. It was from this cause that a temple was dedicated to Fever, at the public expense, on the Palatine Hill.”⁶¹ The Roman poet knows that “the mysteries of cruel magicians are abominated by the heavenly gods.”⁶² It is admitted that “our forefathers believed that purifications could remove the cause of every evil,”⁶³ the implication being that later, in the Roman Empire, at least the educated classes and all men who worship the Olympians reject such a belief. It is emphasized, however, that “it was in Greece that the custom originated.” In the same way Plutarch claims an alien origin for magic which, he says, the Greeks took over “from the barbarians, learning their evil knowledge.”⁶⁴ Certainly, the demonic conceptions are influential in Rome as well as in Greece, but they are consciously suppressed. Both nations assert the foreign character of those beliefs, as usual making another people responsible for them; even if purifications are used,

βάλλοντας ἢ μεταβολὰς ἀέρων ἀήθεις καὶ τόπων. Plutarch in this passage is speaking of the atheist because he intends to contrast his behavior with that of the superstitious. But he presupposes the same attitude for the pious man.

⁶¹ The Natural History of Pliny, II, 15, Translated by J. Bostock and H. T. Riley, I, 1893, p. 21 (cf. Cicero, De Natura deorum, III, 63 and De legibus, II, 28): In numeros quidem credere atque etiam ex vitiis hominum . . . majorem ad socordiam accedit. Fragilis et laboriosa mortalitas in partes ista digessit infirmitatis suae memor, ut portionibus coleret quisque quo maxime indigeret. Itaque nomina alia aliis gentibus et numina in iisdem innumerabilia invenimus, *inferis* quoque in genera discriptis, morbisque et multis etiam pestibus, dum esse placatas trepido metu cupimus. Ideoque etiam publice Febris fanum in Palatio dicatum est.

⁶² Lucan, The Civil War VI, 430-31: superis detestanda deis saevorum arcana magorum.

⁶³ Ovid, Fasti II, 35-37: Omne nefas omne mali purgamina causam credebant nostri tollere posse senes.

⁶⁴ Ovid, l. c., 38: Graecia principium moris fuit. Plutarch, On Superstition, 166: ὦ βάρβαρ' ἐξευρόντες "Ἕλληνες κακά.

they do not belong to that ritual which is recognized as the old and genuine religion.⁶⁵ To be sure, one is not justified in holding as the most characteristic feature of their behavior feelings which are held in contempt by men themselves. What is thought to be superstitious by the ancients, cannot be interpreted as their general attitude toward disease.⁶⁶

It stands to reason then that the Greek physicians understood illness as caused by sun and air and winds or by the nature of man, and that the average people accepted this explanation. Physicians and laymen, however, usually considered these factors as the expression of divine agencies; the merely natural interpretation was as rare and restricted as the superstitious belief in demons; both are exceptional cases, departures from the rule. It is not by chance that Asclepius is the god of doctors and of patients. He represents the rational theology in the Greek sense, in sharp opposition to every demonic religion, to magical rites and purifications, as the inscription on his temple in Epidaurus reveals: "Pure must be he who enters the fragrant temple; purity means to think nothing but holy thought."⁶⁷

⁶⁵ Cf. J. Bernays, *Theophrastos' Schrift über Frömmigkeit*, Berlin 1866, p. 106. He stresses the fact that sacrifices for the sake of purifications, the latest in the development of Greek religion, are not on the same plane as the other sacrifices, even in the time of Theophrastos, who classifies the Orphic mysteries also among superstitious rites (in his characterization of the superstitious). Concerning earlier centuries and their dislike of purifications, cf. e. g., Plato, *Republic*, 364b, in regard to a later period cf. the Neo-Platonic polemic in the book of Porphyry, described by Bernays, l. c.

⁶⁶ The contention of the pious man that it is God who sends the disease, expressed already in the Homeric Epic (Cf. *Odyssee*, V, 394-97; IX, 409-11, also the pestilence in the first book of the *Iliad* is sent from God) must have been common to every period. But even in the epic no purifications are used, those which are mentioned concern only the usual preparation for prayers and sacrifices. (*Iliad*, I, 313, contrary to E. Rohde, *Psyche*⁹⁻¹⁰, II, 1921, p. 76, 1, who himself is more cautious in his judgment p. 71.) At any rate, the pious belief must be carefully differentiated from the theory that disease is a kind of pollution which has to be purified. These are two different attitudes. Already Hesiod says (*Erga* 102-4): *νοῦσοι δὲ ἀνθρώποισιν ἐφ' ἡμέρη αἶ δ' ἐπὶ νυκτὶ αὐτόματοι φοιτῶσι κακὰ θνητοῖσι φέρουσαι σιγῇ, ἐπεὶ φωνὴν ἐξείλετο μητίετα Ζεὺς*.

⁶⁷ Porphyry, *De abstinence Animae*, II, 19: *ἀγνὸν χρὴ ναοῖο θυώδεος ἐντὸς λόντα / ἔμμεναι. ἀγνεία δ' ἔστι φρονεῖν ὅσια*. I shall not discuss whether Asclepius was originally a chthonic Hero or not. There is no doubt that he came to be generally accepted by the ancient world as an Olympian.

II

THE TREATMENT OF DISEASES

The myth of the god Asclepius says that of "those whosoever came suffering from the sores of nature, or with their limbs wounded, either by grey bronze or by far-hurled stone, or with bodies wasting away with summer's heat or winter's cold, he loosed and delivered divers of them from diverse pains, tending some of them with kindly songs, giving to others a soothing potion, or, haply, swathing their limbs with simples, or restoring others by the knife."⁶⁷ The god, in his treatment of diseases resorts to music, to drugs applied either internally or externally and to the use of the knife. The human physician is a surgeon and a pharmacologist, he invents the regulation of diet, in rare cases he has recourse to music. The therapy of Greek as well as of Roman physicians is, then, throughout the centuries a scientific and natural one. But again it is necessary to determine the principles underlying the scientific and natural method of healing.

It is the aim of surgery and dietetics to influence the disease by the action and understanding of the physician. So far no other than human power is involved, yet, there is the problem to what extent the body can be helped at all from the outside, how much the healing-process as such depends not on what is done by the physician but on what is achieved by the bodily forces themselves. In other words, what value can be attributed to the medical art? The various physicians answer this question in different ways, depending on their different metaphysical standpoints. Plato remarks that all those who understand nature as a power of its own devoid of god, at the same time deprive the different arts of their efficacy. Like heaven and the stars and the seasons, they say, animals and plants have been produced by the elements. "Not through reason nor through any god

⁶⁸ Pindar, Pythian Odes, III, 47-53 (The Odes of Pindar with an English translation by Sir John Sandys, Loeb Class. Library, 1927, p. 189): τοὺς μὲν ὦν, ὅσσοι μόλον αὐτοφύτων ἐλκέων ξυνάονες, ἢ πολιῷ χαλκῷ μέλη τετρωμένοι ἢ χερμάδι τηλεβόλῳ, ἢ θερινῷ πυρὶ περθόμενοι δέμας ἢ χειμῶνι, λύσαις ἄλλον ἀλλοίων ἀχέων ἔξαγεν, τοὺς μὲν μαλακαῖς ἐπαιοδαῖς ἀμφέπων, τοὺς δὲ προσανέα πίνοντας, ἢ γυίοις περάπτων πάντοθεν φάρμακα τοὺς δὲ τομαῖς ἔστασεν ὀρθούς. The translation of μαλακαῖς ἐπαιοδαῖς differs from the usual one, for the explanation thereof cf. p. 235, 102.

or art, but . . . through nature and chance. Art, however, later arising therefrom, comes into being later and is itself mortal since it is born from mortal things. Later on it creates some playthings which do not much partake of truth. . . . Arts which create something serious also are those which join their power with nature—like medicine, agriculture, and gymnastics.”⁶⁹ Medicine according to such an atheistic theory undoubtedly belongs to those arts which accomplish something real, but medical art considered in this light, is no longer a factor of its own. The result of its action derives from a source outside the art; the artist becomes simply the help-mate of nature. This is the theory expressed also by one of the *Epidemiae*: “Nature is the physician of diseases.”⁷⁰ Thus, the power of nature is raised to its highest level, but in that case the physician must abdicate. If nature heals diseases then the physician ceases to do so. Such a theory is destructive of medical art.

No one will deny that “if nature be in opposition, everything is vain.”⁷¹ For “if a man demand from an art a power over what does not belong to the art, or for nature a power over what does not belong to nature, his ignorance is more alike to madness than to lack of knowledge.”⁷² These exaggerations aside, however, the reality of the art as a force which need not be derived from another force cannot be doubted. Neither chance nor spontaneous healing can contradict the proper value of medicine. Moreover, “if the medical art and medical men brought about a cure only by means of medicines, purgative or astringent, my argument would be weak. As it is, the physicians of greatest repute obviously cure by regimen and by other

⁶⁹ Plato, *Laws*, X, 889c-d: οὐδὲ διὰ τινὰ θεὸν οὐδὲ διὰ τέχνην ἀλλὰ . . . φύσει καὶ τύχῃ. τέχνην δὲ ὕστερον ἐκ τούτων ὑστέραν γενομένην, αὐτὴν θνητὴν ἐκ θνητῶν ὕστερα γεγεννηκέναι παιδείας τινὰς, ἀληθείας οὐ σφόδρα μετεχούσας . . . αἱ δὲ τι καὶ σπουδαῖον ἄρα γεννῶσι τῶν τεχνῶν, εἶναι ταύτας ὁπόσαι τῇ φύσει ἐκοίνωσαν τὴν αὐτῶν δύναμιν, οἷον αὖ ἰατρικὴ καὶ γεωργικὴ καὶ γυμναστική.

⁷⁰ Hippocrates, ed. Littré, V, p. 314, νόσων φύσεις ἰητροί. The author expressly says that to him nature is devoid of thinking and accomplishes everything without having learned it. This corresponds to the Platonic characterization of natural and irreligious philosophy and shows that the statement of the Hippocratic book can be linked with this theory. (Contrary to Deichgräber's reading S B Berl. 1933, 3, 52.)

⁷¹ Jones, l. c., II, p. 263: φύσιος γὰρ ἀντιπρησσοῦσης κενεὰ πάντα. Although these words are used in regard to education, they are certainly valid in a wider sense too.

⁷² Jones, l. c., II, p. 203: εἰ γάρ τις ἢ τέχνην ἐς ἃ μὴ τέχνη, ἢ φύσιν ἐς ἃ μὴ φύσις πέφυκεν, ἀξιώσειε δύνασθαι, ἀγνοεῖ ἄγνοϊαν ἀρμόζουσας μανίῃ μᾶλλον ἢ ἀμαθίῃ.

substances, which nobody—not only a physician but also an unlearned layman, if he heard of them—would say do not belong to the art. Seeing then that there is nothing that cannot be put to use by good physicians and by the art of medicine itself, but in most things that grow or are made are present the essential substances of cures and of drugs, no patient who recovers without a physician can logically attribute the recovery to spontaneity. Indeed, under a close examination spontaneity disappears; for everything that occurs will be found to do so through something, and this ‘through something’ shows that spontaneity is a mere name, and has no reality. Medicine, however, because it acts ‘through something,’ and because its results may be forecasted, has reality, as is manifest now and will be manifest for ever.”⁷³ In this way the self-sufficiency of medical art is demonstrated on a rational basis contrary to the naturalists and disbelievers.

It is the usual attitude for the physician which is formulated in the first book of the *Epidemiae*: “The art has three factors, the disease, the patient, the physician. The physician is the servant of the art. The patient must cooperate with the physician in combating the disease.”⁷⁴ Art and nature are thus properly evaluated. In the fight against illness, the knowledge of the physician is one factor, nature the other. Yet such a conception obviously presupposes a belief which gives God his share in the processes of the world. It is again the religious rationalist who, contrary to the atheistic thinker, has real confidence in his art. He notes equally and fairly the success and failure of nature. For nature, to him, has two different aspects:

⁷³ Jones, l. c., II, pp. 199-201: “Ἐτι τοίνυν εἰ μὲν ὑπὸ φαρμάκων τῶν τε καθαιρόντων καὶ τῶν ιστάντων ἢ ἱησις τῇ τε ἱητρικῇ καὶ τοῖσιν ἱητροῖσι μῶνον ἐγίνετο, ἀσθενὴς ἦν ἂν ὁ ἐμὸς λόγος. νῦν δὲ φαίνονται τῶν ἱητρῶν οἱ μάλιστα ἐπαινεόμενοι καὶ διαιτήμασιν ἰώμενοι καὶ ἄλλοις γε εἶδουσιν, ἃ οὐκ ἂν τις φάιη, μὴ ὅτι ἱητρός. ἀλλ’ οὐδὲ ἰδιώτης ἀνεπιστήμων ἀκούσας, μὴ οὐ τῆς τέχνης εἶναι. ὅπου οὖν οὐδὲν οὐτ’ ἐν τοῖς ἀγαθοῖσι τῶν ἱητρῶν οὐτ’ ἐν τῇ ἱητρικῇ αὐτῇ ἀχρεῖόν ἐστιν, ἀλλ’ ἐν τοῖσι πλείστοις τῶν τε φυομένων καὶ τῶν ποιευμένων ἔνεστι τὰ εἶδεα τῶν θεραπειῶν καὶ τῶν φαρμάκων, οὐκ ἔστιν ἔτι οὐδενὶ τῶν ἀνευ ἱητροῦ ὑγιαζομένων τὸ αὐτόματον οὐδὲν φαίνεται ἐὼν ἐλεγχόμενον. πᾶν γὰρ τὸ γινόμενον διὰ τι εὐρίσκειτ’ ἂν γινόμενον, καὶ ἐν τῷ διὰ τι τὸ αὐτόματον οὐ φαίνεται οὐσίην ἔχον οὐδεμίην ἀλλ’ ἢ ὄνομα. ἢ δὲ ἱητρικὴ καὶ ἐν τοῖσι διὰ τι καὶ ἐν τοῖσι προνοουμένοις φαίνεται τε καὶ φανεῖται αἰεὶ οὐσίην ἔχουσα.

⁷⁴ Jones, l. c., I, p. 165: ἡ τέχνη διὰ τριῶν, τὸ νόσημα καὶ ὁ νοσέων καὶ ὁ ἱητρός. ὁ ἱητρός ὑπὲρ τῆς τέχνης· ὑπεναντιοῦσθαι τῷ νοσήματι τὸν νοσέοντα μετὰ τοῦ ἱητροῦ.

it not only heals, it also destroys. The physician, in some cases, can rely on it, in others he must fight against it.⁷⁵

All these ideas, I think, are summed up in the statement "that there could surely be nothing more useful or more necessary to know than these things (sc. which the physician knows) and how the first discoverers, pursuing their inquiries excellently and with suitable application of reason to the nature of man, made their discoveries, and thought their art worthy to be ascribed to a god, as in fact is the usual belief."⁷⁶ For medicine is so great a power and is so mighty in itself that a god must have given it to mankind. The rational element contained in medical art is divine. Yet very seldom does this conviction lead to an exaggeration of the power of the art. In contrast to the conception that nature alone, not the physician, heals the disease, it is stated in one book: "By stitching and cutting, that which is rotten in men is healed by physicians. This too is part of the physician's art: to do away with that which causes pain, and by taking away the cause of his suffering to make him sound. Nature of herself knows how to do these things. When a man is sitting it is a labour to rise; when he is moving it is a labour to come to rest. In other respects too nature has the same qualities as has medical art."⁷⁷ The religious physician is usually aware of the limits of his art as his definition of medicine reveals: 'In general terms, it is to do away with the sufferings of the sick, to lessen the violence of their diseases, and to refuse to treat those who are over-

⁷⁵ M. Neuburger, *Die Heilkraft d. Natur*, 1926, pp. 9-10, stresses the fact that in the Hippocratic books the healing power of nature is not exaggerated in a phantastic measure. He is also of the opinion that thereby the negativism and quietism is avoided which very easily results from too strong a belief in nature.

⁷⁶ Jones, l. c., I, 37: οὐκ ἂν οὖν ἕτερα τούτων χρησιμώτερα οὐδὲ ἀναγκαιότερα εἶη εἰδέναι δήπου, ὥς δὲ καλῶς καὶ λογισμῷ προσήκοντι ζητήσαντες πρὸς τὴν τοῦ ἀνθρώπου φύσιν εὗρον αὐτὰ οἱ πρῶτοι εὐρόντες καὶ ᾤήθησαν ἀξίην τὴν τέχνην θεῷ προσθεῖναι, ὥσπερ καὶ νομίζεται.

⁷⁷ Jones, l. c., IV, pp. 253-55 (slightly altered): κεντεύμενοί τε καὶ τεμνόμενοι τὰ σαθρὰ ὑπὸ τῶν ἰητρῶν ὑγιαίνουν. καὶ τόδε ἰητρικῆς. τὸ λυπέον ἀπαλλάσσειν, καὶ ὑφ' οὗ πονεῖ ἀφαιρέοντα ὑγίεια ποιεῖν. ἡ φύσις αὐτομάτῃ ταῦτα ἐπίσταται. καθήμενος πονεῖ ἀναστῆναι, κινεόμενος πονεῖ ἀναπαύσασθαι, καὶ ἄλλα τὰ αὐτὰ ἔχει ἡ φύσις ἰητρικῇ. It is in accordance with the interpretation given in regard to the attitude of the physician that the book on Ancient Medicine states that the nature of man consisting of the mixture of the humors can and should be voluntarily altered by the physician. The same is valid for the book on the Nature of Man (Jones, l. c., IV, p. 10) and,

mastered by their diseases, realizing that in such cases medicine is powerless.”⁷⁸

In later centuries the recognition of nature as a teleological power must have confirmed the advisability of the withdrawal of the physicians. Themison, who does not believe in teleology, is the first to proceed farther than the physicians before him and to write methodically about the treatment of chronic diseases. Erasistratos, admitting that nature does many things in vain, and Asclepiades, stating that nature cannot heal at all, are the only physicians whose treatment of some of the chronic diseases is especially mentioned.⁷⁹ This development is reflected by the change in the attitude of the doctor. For in the Hippocratic book it is said: “I should most commend a physician who in acute diseases, which kill the great majority of patients, shows some superiority.”⁸⁰ In the books of the Methodists it is the chronic diseases “which bring those who have experience in medicine great and eternal fame.”⁸¹ In this case the merely natural and mechanistic understanding of nature brought about a progress in medicine; but this is an exception; in general, like in the explanation of phenomena, the Dogmatists are more progressive than the Methodists.

I think, for more of the Hippocratic writings. But it is impossible again to deal with all of them in this connection.

⁷⁸ Jones, l. c., II, p. 193: τὸ δὴ πάμπαν ἀπαλλάσσειν τῶν νοσεόντων τοὺς καμάτους καὶ τῶν νοσημάτων τὰς σφοδρότητας ἀμβλύνειν, καὶ τὸ μὴ ἐγχειρεῖν τοῖσι κεκρατημένοις ὑπὸ τῶν νοσημάτων, εἰδότας ὅτι ταῦτα οὐ δύναται ἱητρικὴ. As regards the restraint of Hippocratic physicians and the modern discussion of this problem cf. Jones, l. c., I, p. XVI sq.

⁷⁹ Caelius Aurelianus, De morbis acutis et chronicis, ed. I. C. Amman, 1709, pp. 267-68: scribentium igitur medicinam nullus ante Themisonem tardarum passionum curationes principaliter ordinavit . . . Alii disperse atque de aliis passionibus scribentes . . . ut Erasistratus et Asclepiades. Themison autem tardarum passionum tres libros scripsit. As regards the attitude of Erasistratus and Asclepiades toward nature cf. Neuburger, l. c., p. 11 sq., who is not aware of the connection between these divergent theories and the discovery of the treatment of chronic diseases.

⁸⁰ Jones, l. c., II, p. 67: μάλιστα δ' ἂν ἐπαινέσαιμι ἱητρὸν, ὅστις ἐν τοῖσιν ὀξέσι νοσήμασι, ἃ τοὺς πλείστους τῶν ἀνθρώπων κτείνει ἐν τούτοις διαφέρων τι τῶν ἄλλων εἶη ἐπὶ τὸ βέλτιον. Cf. also the beginning of the Prognostic of Hippocrates.

⁸¹ Caelius Aurelianus, l. c., peritis medicinae claram eternamque gloriam quaerunt. Cf. Aretaeus, ed. C. Hude, CMG, II, 1923, pp. 36, 4 sq.; p. 144, 3 sq.

These considerations are of course important not only for surgery and dietetics, but also for pharmacology. In the treatment by drugs, too, the question arises how far the physician is able to help or must rely on the nature of the patient. On the other hand, there is a specific problem of pharmacology in connection with the efficacy of plants. Certainly herbs are prescribed as a means of natural therapy. If one remembers the ambiguity of the term "nature" in ancient medicine, one immediately realizes that in the administration of remedies also various attitudes must be differentiated from one another. All those men to whom nature is devoid of God also see in plants nothing but natural powers. But it is not only the superstitious layman, Pliny, who recognizes the grandeur and power of God, especially in the vegetable kingdom.⁸² The great anatomist and physiologist Herophilus is said to have called the plants "the hands of the gods."⁸³ This statement is not mere rhetoric. If nature is divine, the plants are divine too. Almost all physicians seem to agree with this. Some compose special remedies which are called sacred.⁸⁴ But Galen states in a more comprehensive sense: "One is right in saying that the plants act like the hands of the gods, since it is efficacious for the man who uses them to be trained in logical method and to have by nature a good understanding besides."⁸⁵ This interpretation which accepts the divinity of the plants because of the divinity of the intellect in the human being who applies them, is just as characteristic for the Greek attitude as the more verbal explanation of Herophilus' statement.

Undoubtedly rationalistic supernaturalism revives the old conception according to which the power of plants contains something

⁸² Pliny, *Naturalis Historia*, XIX, finis.

⁸³ Scribonius Largus, *Compositiones*, ed. G. Helmreich, 1887, p. 1, 1-3: Herophilus fertur dixisse medicamenta divinas manus esse. Cf. Galen, *Opera* ed. Kühn, XII, p. 966; Plutarch, *Quaest. Symp.* IV, 1, 3, 663c., the same is told about Erasistratos. Cf. also Nicander, *Theriaca*, v. 7.

⁸⁴ In Galen's works those named as inventors of divine remedies are: Antipatros, XIII, p. 136; Andromachos, XIII, p. 126; Archigenes in Aetius, III, 114 (CMG, VIII, 1, 1935, p. 305, 11 sq.); in regard to Rufus cf. J. Ilberg, *Rufus v. Ephesus*, *Abh. d. Sächs. Akademie*, XLI, 1930, p. 20.

⁸⁵ Galen, *Opera*, ed. Kühn, XII, p. 966: *ἐάν τε πάλιν οἷόν περ θεῶν χειρᾶς εἶναι τὰ φάρμακα καὶ τοῦτο ὀρθῶς ἐρεῖς. ἀνύει γὰρ μεγάλα τὸν χρώμενον αὐτοῖς ἔχοντα γεγυμνασμένον ἐν λογικῇ μεθόδῳ μετὰ τοῦ καὶ συνετὸν εἶναι φύσει.*

miraculous. But this does not mean the introduction of any magical belief. On the contrary, it hinders the acceptance of those ideas.⁸⁶ Galen expressly states that the Herophilean Andreas recorded magical rites to be used in connection with plants and that he was the first to discuss sorcery and such nonsense in medical books. Hippocrates, Euryphon, Dieuches, Diocles, Pleistonicus, Praxagoras, Herophilus, did not care for magical remedies. All the great pharmacologists, Crateuas, Heraclides of Tarent, Dioscurides, rejected those things. Andreas and Pamphylus and the men who followed them constituted a small minority; they were scholars rather than physicians; they were antiquaries.⁸⁷ These men, then, were an exception, they were isolated as were those who believed in the demonic character of diseases. And it is not venturous to assume that the same reasons by which the explanation of illness through demons was refused, were responsible also for the attitude of the physicians in pharmacology.

But all the pharmacologists, nay almost all the physicians, believed in sympathetic remedies. They are to be found in Dioscurides as well as in Galen, in the books of Stoic physicians and even of Methodists. Is this not the reception of magic into medicine, and the first sign of decay? For, the Hippocratic books are free of those remedies, and it is only from the Hellenistic time on that they begin to be used. However, the sympathetic effect, to the ancients is a natural phenomenon and proved by experiments, not by any magical theory. Even the Stoics understand it in this way and collect facts as proof

⁸⁶ The mysterious effect of plants, still intimated at least in the Homeric Epic, was soon forgotten. The term *φάρμακον*, since the 7th century B. C., had no longer any magical meaning (cf. W. Artelt, *Studien z. Gesch. d. Begriffe Heilmittel u. Gift*, *Stud. z. Gesch. d. Medizin*, herg. v. Karl Sudhoff, 23, 1937, pp. 46 sq.). When in the beginning of the Hellenistic era more plants, especially those of the Orient, became known to the Greek physician, a new and strong influx of magic took place. For in the Orient magical rites were combined with the plucking of plants as well as with their preparation and use; and Egypt is, already in the Homeric poem, famous for its remedies (Artelt, *l. c.*, p. 44).

⁸⁷ Galen, *Opera* ed. Kühn, XI, p. 795. Concerning Andreas cf. F. Susemihl, *Gesch. d. Griech. Literatur in der Alexandrinerzeit*, I, 1891, p. 817, 231; II, 1892, p. 421, 32. It is because of the rejection of those things by the medical profession that they are to be found only in the magical papyri which contain not the knowledge of physicians but prescriptions of folklore. What Galen relates about Andreas corresponds with *Papyri Graecae Magicae*, ed. K. Preisendanz, I, 1928, p. 168-69; cf. also Rohde, *Psyche*, *l. c.*, II, p. 87, 3.

of its reality, they do not rely on mere reasoning alone.⁸⁸ Unconvincing as the material seems to the modern it did convince even the Sceptics in antiquity. The only thing in the Stoic discussion that the Academic philosopher finds to agree with is the demonstration of sympathetic relations in the universe. For these are certain, although they must be explained, as the Sceptic believes, not by a divine spirit but by the spontaneity of nature.⁸⁹ Thus, from a teleological aspect as well as from a mechanical one sympathy is a reality.

That really experience is the basis of the judgment concerning the sympathetic or antipathetic effect, is shown by the opinion about amulets. Soranus, for instance, rejects the wearing of amulets because his experience does not confirm the good results which others claim to have observed. He once admits amulets because of their psychological influence.⁹⁰ In the same way Galen accepts that alone what according to his experience has proved to be helpful and leaves all the other things to those who are able to prove them by their experience.⁹¹ Thus, physicians try very carefully to exclude every allusion to magic, they go no farther than their own experience leads. Nay, they are aware that the use of amulets is a very ambiguous means and almost beyond the realm of medicine. It is characteristic that even a physician of the 6th century A. D. prescribes amulets only in those cases in which "no remedy of the art still has power."⁹² But since the aim of medicine is to make healthy and to

⁸⁸ Cf. E. Zeller, *Die Philosophie d. Griech.*, III, 1³, 1880, p. 169, 2: "Unter der Sympathie verstehen die Stoiker nicht den magischen Zusammenhang, welchen der neuere Sprachgebrauch mit diesem Wort bezeichnet, sondern das naturgemässe Zusammentreffen gewisser Vorgänge in den verschiedenen Teilen der Welt." Cf. also p. 237, 113.

⁸⁹ Cicero, *De natura deorum*, III, 11, 28: "Itaque illa mihi placebat oratio de convenientia consensuque naturae, quam quasi cognatione continuata conspirare dicebas, illud non probabam quod negabas id accidere potuisse nisi ea uno divino spiritu contineretur. Illa vero cohaeret et permanet naturae viribus non deorum, estque in ea iste quasi consensus, quem *συμπάθειαν* Graeci vocant; sed ea quo sua sponte maior est eo minus divina ratione fieri existimanda est."

⁹⁰ Soranus, *CMG*, IV, 1927, p. 47, 17; 121, 26.

⁹¹ Galen, *Opera*, ed. Kühn, XII, p. 573.

⁹² Alexander v. Tralles, ed. Puschmann, II, p. 319: *εἰ δὲ . . . μηδενὸς τῶν ἀπὸ τῆς τέχνης ἰσχύοντος . . . καὶ τοῖς φυσικοῖς περιήπτοις οὐδὲν ἄτοπον κεχρηῆσθαι χάριν τοῦ σῶσαι τὸν κάμνοντα.*

overcome diseases, "it is wonderful to win in this struggle, and for that purpose to use everything which can possibly help,"⁹³ everything which is within human experience.

Yet, certain as it is that experience proves the sympathetic effect, this experience can be had only on the presupposition of a specific theory. One must at least believe that it is possible to connect two phenomena which happen at the same time. Otherwise the coincidence of facts will be understood as fortuitous and not as purposeful. It is for this reason that the Empiric physicians do not recognize sympathy, that only the experience of the Dogmatists and of a few Sceptics who do not cling too strictly to their views recognizes the reality of these effects. The belief in a teleological power of nature is presupposed by the belief in sympathy.

It is in accordance therewith that sympathetic influences are first mentioned in the writings of Theophrastus on natural philosophy.⁹⁴ Theophrastus, although a Dogmatist and an Aristotelian, emphasizes the value of experience. He states that especially natural science, the objects of which are the bodies of the physical world, must start from experience; according to him it is perception which provides the material for human thought.⁹⁵ Thus, Theophrastus becomes interested also in things which are called fairy-tales by earlier thinkers. But he is the first who is unbiased enough not to think impossible from the outset what other people declared to be nonsense without any further inquiry. The discovery and utilization of

⁹³ Ibid., II, p. 474-75: *καλὸν γὰρ νικᾶν καὶ πάσῃ μηχανῇ βοηθεῖν*. Concerning the material preserved cf. L. Deubner, Greek charms and amulets, in *Encyclopaedia of Religion and Ethics*, ed. by J. Hastings, III, 1910, pp. 433-439.

⁹⁴ Theophrast, *Opera*, ed. F. Wimmer, III, 1862, p. 92 (On Odor 63), p. 218 (Fr. 172, 3); p. 133, sympathetic effects in the human body are described, comparable to those already known by the Hippocratic writers (cf. Jones, l. c., I, p. 351, On Nutriment, XXIII). In the ps-Aristotelian *Problemata* (Aristotle 886a 24 sq.) probably written in the time of Theophrastus, examples of sympathy are described too. E. Stempler, l. c., p. 7, names the Pythagoreans, Empedocles, and Plato as forerunners of Theophrastus. The conception of sympathy goes back certainly to the period before the 4th century B. C. But it is Theophrastus who gives sympathy its place in natural science. Since he acknowledges its effect apparently on account of philosophical argumentations it is not the Stoics who have the first system of sympathy (contrary to Stempler, l. c.).

⁹⁵ Cf. Zeller, l. c., II, 2, 1879, pp. 813-14 and Überweg-Prächter, *Die Philosophie d. Alterums*¹², 1926, p. 403, where the relation between Theophrastus and Strato is stressed.

sympathetic effects is a scientific advance not made until the 4th century B. C.⁹⁶ This fact explains why sympathetic remedies are still unknown to the Hippocratic physicians. Moreover, it shows that from the point of view of ancient medicine the use of such things cannot be determined as deviation from the true method. It is on a scientific principle quite different from that of magic that the use of sympathetic remedies is based in antiquity.

Later, with the rise of the Neo-Platonic philosophy and of the Christian religion, a change took place. The Neo-Platonists explained sympathy not by physical but by psychic causes.⁹⁷ What had been physical, thereby became spiritual. The Christian belief, on the other hand, separated God from nature; nature was no longer an animate being. Thus, effects which were in earlier times natural and empirical, later became mysterious. And since they were supposed to be mysterious they were looked upon with suspicion or were forgotten by the physicians. Theodorus Priscianus says in the beginning of his book on physical remedies: "Nature is everywhere performing a great mystery," but "you will forgive me my work, oh my forefathers. The crude generation of our times is ignorant of the procedure of your investigations."⁹⁸ And it is Alexander of Tralles, a

⁹⁶ Cf. Theophrastus, *Inquiry into Plants*, IX, 18, 4, 10; and in contrast to his statement Aristotle, *History of Animals*, 605a, 4-6, τὰ δ' ἐπιμυθεύόμενα πέπλασται μᾶλλον ὑπὸ γυναικῶν καὶ τῶν περὶ τὰς ἐπιδάς. I cannot deal with the problem whether the 9th book of the *Inquiry into Plants* is genuine or not. H. Bretzl, *Botanische Forschungen des Alexanderzuges*, 1903, p. 366, denies the authenticity of the last part "dessen nicht theophrasteischen Geist jeder (Botaniker) beim ersten Durchlesen fühlt." Rehm und Vogel, *Exakte Wissenschaften*, I. c., 5, 57, agree with him. But G. Senn, *Das pharmazeutisch-botanische Buch in Theophrast's Pflanzenkunde* (*Verhandlungen d. Schweizer Naturforschenden Gesellschaft*, Zermatt, 1923, II. Teil, pp. 201-02), opposes this opinion just as a botanist. The material, at least is, according to him, genuine and the assumption of a "Pseudotheophrast" unnecessary. Manifold wordings of the book are now also proved by O. Regenbogen, *Hermes* 69, 1934, pp. 75 sq.; 190 sq., as far as the first books are concerned. Nothing indicates that the material even if it is not collected by Theophrastus himself, does not go back at least to his school. So much is certain, that the interest in sympathetic remedies is rather an indication in favor of Theophrastus than against him. The rejection of incantations and of superstition (IX, 19, 3) in general is also in accordance with the attitude of Theophrastus. At any rate, it is not justifiable to omit the passages concerning sympathetic remedies, as is done in the edition of A. Horst in the *Loeb Classical Library*, 1916, p. 310.

⁹⁷ E. Zeller, I. c., III, 2³, 1881, p. 558.

⁹⁸ Theodorus Priscianus, *Euporiston*, ed. Valentin Rose, 1894, p. 250, 14: est enim

late physician of the decadent age, who states: "I should like to use all kinds of remedies, but because of the stupidity of the many of to-day who blame those who do it, I shrink from applying them."⁹⁹ The physician employing sympathetic remedies is now considered to be a sorcerer. In earlier centuries he was a scientist.¹⁰⁰

In surgery, dietetics and pharmacology then Greek medicine is rational and hostile to magic. The same is true in regard to the use of music as a remedy for pains. The Sicilian physicians, like others, resorted to music as Caelius Aurelianus relates: "Others have approved of the use of songs as the brother of Philistion also remarks in the XXII book on remedies writing that a certain piper had played his melodies over parts of the body which, quivering and throbbing, were relaxed after the pain had been destroyed."¹⁰¹ How this is to be understood becomes evident from the discussions of philosophers who were interested in the effect of music and from the judgment of Soranus about it. Gellius relates: "I ran across the statement very recently in the book of Theophrastus On Inspiration that many men have believed and put their belief on record, that when gouty pains in the hips are most severe they are relieved if a flute-player plays soothing measures. That snake-bites are cured by the music of the flute, when played skillfully and melodiously, is also

in omni mundo natura quae operetur grande secretum; 250, 17-20: dabit mihi veniam operis, patres priores. disputationum enim vestrarum rationes . . . aetas mundi rudis ignoravit. Cf. Pliny, N. H. XIX, 186: opus occultum, the hidden work.

⁹⁹ Alexander v. Tralles, ed. Puschmann, I, 1878, p. 573: ἐγὼ δὲ φιλῶ πᾶσι κεχρηῆσθαι. διὰ δὲ τοὺς πολλοὺς τοὺς ἐν τῷ νῦν χρόνῳ ἀμαθεῖς ὄντας καταμέμφεσθαι τοῖς χρωμένοις τοῖς φυσικοῖς, ἔφυγον συνεχῶς χρηῆσθαι τοῖς φύσει δρᾶν δυναμένοις. . . .

¹⁰⁰ It is significant for the derivation of the sympathetic remedies from experience concerning natural facts that they are usually called *φυσικά* or *ἐμπειρικά*. My attention was first drawn to this fact by a lecture of O. Temkin on Magic and Experience in which he emphasized the significance of these expressions (cf. also M. Neuburger, *Gesch. d. Medizin* II, p. 26). It is again in the magical papyri that the mysterious character of those things occurs first, the derivation of the healing power from nature being stressed. Here too, for the first time nature is revered as a deity who is not identical with the god governing the world but a demon who performs miraculous effects. Cf. K. Preisendanz, *Philologus*, 67, 1908, p. 474.

¹⁰¹ Caelius Aurelianus, *De morbis acutis et chronicis*, l. c., p. 555: "Alii cantilenas adhibendas probaverunt, ut etiam Philistionis frater idem memorat libro XXII, de adiutoriis scribens quendam fistulatorem loca dolentia decantasse, quaecum saltum sumerent palpitando, discusso dolore mitescerent."

stated in a book of Democritus, entitled *On Deadly Infections*, in which he shows that the music of the flute is medicine for many ills that flesh is heir to. So very close is the connection between the bodies and the minds of men, and therefore between physical and mental ailments and their remedies."¹⁰² And Soranus asserts that those men were very stupid who believed that the strength of the illness can be expelled by melodies and songs.¹⁰³ There is no magical belief responsible for the use of music any more than magical powers are presupposed in the use of words. Diocles holds that one has to understand friendly consolation as incantation. For it stops the flowing of the blood when the wounded man is attentive and, as it were, connected with the man who speaks to him."¹⁰⁴

At any rate in the administration of songs and in the use of words no magical belief is to be found. Every kind of incantation, too, is throughout antiquity rejected by physicians. In the Hippocratic book on the Sacred Disease it is said: "But perhaps what they profess (sc. in regard to incantations) is not true, the fact being that men, in need of a livelihood, contrive and devise many fictions of all sorts."¹⁰⁵ Galen declares all the incantations to be wrong.¹⁰⁶ Nay: "Animals like human beings can be cured not by vain words but by

¹⁰² The Attic Nights of Aulus Gellius with an English Translation by J. C. Rolfe, Loeb Class. Library, 1927, I, p. 352-54: "Creditum hoc a plerisque esse et memoriae mandatum, ischia cum maxime doleant, tum, si modulis lenibus tibicen incinat, minui dolores, ego nuperrime in libro Theophrasti *περὶ ἐνθουσιασμοῦ* scriptum inveni. Viperarum morsibus tibicinium scite modulateque adhibitum mederi, refert etiam Democriti liber, qui inscribitur *περὶ λοιμῶν* in quo docet plurimis hominum morbidis medicinae fuisse intentiones tibiaram. Tanta prorsus adfinitas est corporibus hominum mentibusque et propterea vitiis quoque aut medellis animorum et corporum." It is by the expression *modulis lenibus* that the words *μαλακαῖς ἐπαιδαῖς* in Pindar's Ode must be interpreted, cf. also Theophrast, fr. LXXXVII, Wimmer: "Ὅτι δὲ καὶ νόσους ἰᾶται μουσικὴ θ. ἱστορήσεν ἐν τῷ περὶ ἐνθουσιασμοῦ, ἰσχυακοὺς φάσκων ἀνόσους διατελεῖν εἰ καταυλήσοι τις τοῦ τόπου τῇ φρυγιστὶ ἁρμονίᾳ. Sometimes the invention of this procedure was ascribed to Pythagoras, cf. Caelius Aurelianus, l. c.: Alii denique hoc adjutorii genus Pythagoram memorant invenisse."

¹⁰³ Caelius Aurelianus, l. c.: "Sed Sorani iudicio videntur hi mentis vanitate iactari, qui modulis et cantilena passionis robur excludi posse crediderunt."

¹⁰⁴ Diocles, Fr. 92, Wellmann: *Διοκλῆς ἐπαιδὴν παρέδωκε τὴν παρηγορίαν. Ἰσχαιμον γὰρ εἶναι ταύτην, ὅταν τὸ πνεῦμα τοῦ τετρωμένου προσεχὲς ᾗ καὶ ὥσπερ προσηρητῆμένον τῷ παρηγοροῦντι.*

¹⁰⁵ Jones, l. c., II, p. 147: *ἴσως δὲ οὐχ οὕτως ἔχει ταῦτα, ἀλλ' ἄνθρωποι βίου δεόμενοι πολλὰ καὶ παντοῖα τεχνῶνται.*

¹⁰⁶ Galen, Opera, ed. Kühn, XI, p. 792.

the reliable art of healing.”¹⁰⁷ And in this respect the attitude of the Romans does not vary from that of the Greeks. For Celsus does not advise incantations, either, Varro warns against their use. The Roman law does not recognize as true physicians men who perform incantations.¹⁰⁸

To be sure, incantations were never a means of the physician. The decadent age is in this respect not different from the 5th century B. C.¹⁰⁹ Incantations are not only useless, and wrong, says

¹⁰⁷ Vegetius, ed. E. Lommatzsch, 1903, p. 199, 1-4: Aliquantum praecantatione tentant afferre remedia; quae vanitas ab aniculis solis diligenda est, cum animalia sicut homines non inanibus verbis sed certa medendi arte curentur (this general statement proves that the two incantations which are found in the text must be later additions, p. 306, 5-8; 10-11. The hostile attitude toward those remedies is confirmed p. 65, 3-5; 10-12.) Also in Gargilius Martialis only one incantation is mentioned (l. c., p. 309, 12 sq.). In the *Mulomedicina Chironis*, ed. E. Oder, 1901, p. 62, 7-10, incantations are rejected too. (Two exceptions p. 260, 4; p. 285, 4.) In Paelagonius, ed. M. Ihm, 1892, p. 90, 1, the incantation which is rejected by Vegetius (l. c., p. 199, 1-4) is given in detail. But the situation even in veterinary medicine is characterized by the remark of the editor of Paelagonius (§ 121, p. 154): “Utinam is qui Graeca hippiatrica congescit superstitiosus fuisset. Removit enim fere omnia harum superstitionum exempla, quibus Apsyrti liber refertus fuisse videtur. Unus codex Parisinus Milleri nonnulla servavit obscure scripta . . . Paelagoniana huius generis alia mox sequuntur, quae ne Vegetio quidem digna visa sunt quae reciperentur. Immo is tamquam detrectatorem et contemptorem se iactat . . . etsi apud veteres magno in honore fuerint, ut vel Catonis . . . cantatio barbara testatur.” One can only conclude that it is really impossible to ascribe to ancient physicians, not even to veterinaries the use of incantations.

¹⁰⁸ Cf. Varro, *Catus* (Mommsen, *Röm. Gesch.* III^o, 1875, p. 610). *Digesten* L, 13, 1. § 3 (The physician has the right to sue for his salary) non tamen si incantavit, si inprecatus est, si ut vulgari verbo impostorum utar, exorcizavit. non sunt ista medicinae genera, tametsi sint, qui hos sibi profuisse praedicatione adfirmant. Cato, usually quoted for the Roman use of incantations, is not the only witness and his testimony has no value for the time in which Greek medicine was influential in Rome.

¹⁰⁹ The passages quoted above concerning the use of music are usually referred to as proof for the use of incantations in Greek medicine, cf. Wellman, *Die Fragmente d. Sizilischen Ärzte*, 1901, p. 30a: “Ihr Heilverfahren . . . bestand, in Besprechungen . . . Beachtenswert ist ferner, dass Diokles gleichfalls ein Anhänger jener Schule die *ἐπαοιδαί* zur Stillung des Blutes bei Wunden empfohlen . . . Es ist wahrscheinlich, dass die sikelische Schule diese populären Mittel der Volksmedizin aus pythagoreischer Lehre herübergenommen hat.” Or it is said (*RE*, Suppl. IV, s. v. Epode, pp. 340-41): “Der Gebrauch der Epode ist in der antiken Welt nie geschwunden trotz der Gegner, die dagegen bei den Griechen selbst und bei den Christen auftraten. Schon im 5. Jahrhundert finden wir solche bei den Ärzten . . . Von späteren Ärzten welche ihren Gebrauch verwarfen, seien etwa Soranus . . . und Galen . . . genannt . . . aber diese Stimmen drangen nicht durch, da die

Galen, they are outside of the activity of the physician.¹¹⁰ No one can perform incantations if he wants to be acknowledged as a good doctor: "It is not a learned physician who sings incantations over pains which should be cured by cutting."¹¹¹ This attitude does not signify a progress reached only in the time of the Hippocratic physicians. Homeric medicine is already opposed to such means, and the polemic of the book on the Sacred Disease only proves that in the 5th century B. C. problems must be discussed which before were not worth discussing.¹¹²

The rejection of incantations was the more difficult since not even those who trusted their validity claimed to have a reason by which their effect could be explained.¹¹³ The men who performed incantations were priests, and even Plato admits that for the many it is not easy to come to a definite conclusion concerning the value of incantations.¹¹⁴ But the Olympian religion remains strong enough to resist Only the superstitious resort to incantations. A believer in magic may dare to state that disbelief in incantations proves disbelief in God; but even in the 2nd century A. D. the answer is that this conclusion is rash, that, on the contrary, men who believe they can force God by their prayers are impious, as they were called also in the book on the Sacred Disease.¹¹⁵ It is not until the old religious feeling was weakened that foreign rites and superstition could get the upper hand. And it is important to note that Asclepius, the patron of physicians and patients, was for all pious men of these late centuries

volkstümliche Verwendung der Epoden von Anfang an auch von Ärzten oder solchen die dafür galten, übernommen wurde." Cf. also F. G. Welcker, *Kl. Schriften*, III, 1850, pp. 68 sq. I think it is sufficient to give the passages in full in order to prove that they have no magical implications whatsoever.

¹¹⁰ Galen, *Opera*, ed. Kühn, XI, 792: *μαγγανείαι οὐ περίεργοι μόνον, οὐδ' ἔξω τῆς ιατρικῆς τέχνης, ἀλλὰ καὶ ψευδεῖς ἀπάσαι.*

¹¹¹ Sophocles, *Aias*, 581-82: *οὐ πρὸς ἰατροῦ σοφοῦ θρηνεῖν ἐπὶ πῶδες πρὸς τομῶντι πήματι.*

¹¹² Contrary to Wilamowitz, *Der Glaube der Hellenen*, I, 1931, p. 29 (*Schon im 5ten Jahrhundert*) and Jones, *l. c.*, I, p. 10.

¹¹³ Alexander v. Aphrodisias, *De Fato*, cp. 8, *Supplementum Aristotelicum*, II, 2, 1881, p. 174, 20-25: *ἄδηλα δὲ τὰ αἷτια ἀνθρωπίνῳ λογισμῷ ἐκείνων μᾶλλον ἢ κατὰ τινὰς ἀντιπαθείας γίνεσθαι πεπίστευται ἀγνοουμένης τῆς αἰτίας δι' ἣν γίνεται, ὅποια περὶ λαπτὰ τέ τινα προσείληπται οὐδεμίαν εὐλογον καὶ πιθανὴν αἰτίαν τοῦ ταῦτα ποιεῖν ἔχοντα, ἔτι δὲ ἐπαοιδαὶ καὶ τινες τοιαῦται μαγγανείαι. τούτων γὰρ ὁμολογεῖται μὲν ὑπὸ πάντων ἄδηλος εἶναι ἡ αἰτία, διὸ καὶ ἀναιτιολόγητα λέγουσιν αὐτά.* Not only incantations but all the other magical procedures are then justified by their empirical efficacy.

¹¹⁴ *Laws*, XI, 933a.

¹¹⁵ Lucian, *Philopseudes*, 29.

the symbol of Olympian religion.¹¹⁶ If in antiquity nobody doubted that magic had its origin in medicine as Pliny relates,¹¹⁷ the medical art of the Greeks and Romans has really freed itself from any magical ingredient. And this in spite of the necessary temptation to use everything which may help to cure the patient and in spite of the supposed empirical confirmation of the power of incantations. For even in the latest centuries it is on the efficacy of incantations in those cases in which the other remedies fail, that their use is based and excused. For the superstitious physicians themselves never forget that in performing incantations they transgress the limits of medicine.^{117a}

But what about the relation of physicians to the religious healing of diseases? What do they think about prayers and incubations which were supposed by many people to help against illness in the same way as surgery and dietetics, remedies and music?

Prayers are not dealt with very often in medical books. In one of the Hippocratic writings it is said: "Prayer indeed is good, but while calling on the gods a man should himself lend a hand."¹¹⁸ This is not an ironical statement, for the same author declares:

¹¹⁶ Harnack, *Medizinisches aus d. ältesten Kirchengeschichte*, I. c., p. 72: "Das eigentümliche des Dämonenglaubens im 2. Jahrhundert besteht erstlich darin, dass er aus den dunklen unteren Schichten in die oberen, selbst in die Literatur, empor-
dringt und eine ungleich wichtigere Sache wird wie ehemals, zweitens, dass er keine kräftige naive öffentliche Religion mehr neben sich hat, die ihn niederhält . . . Die ausserordentliche Verbreitung des Dämonenglaubens . . . (ist darauf) zurück-zuführen, dass in der Kaiserzeit das Zutrauen zu den alten Religionen dahinschwand . . ." Concerning the foreign origin of incantations cf. e. g., Diodor, II, 39 (the Chaldeans), III, 58 (Cybele), Lucian, *Demonax*, cp. 23.

¹¹⁷ Pliny, *Naturalis Historia*, XXX, 1: *magicam natam primum e medicina nemo dubitat*. But Pliny himself admits that incantations were rejected by the wisest (I. c., XVIII, 3-4):

^{117a} Cf. Alexander v. Tralles, I. c., II, 1879, p. 475 (the explanation of the supposed change of Galen's opinion concerning incantations); p. 579; p. 585. In this sense it must be understood that Ammianus Marcellinus (*Res Gestae*, XVI, 8, 2) speaks of an "anile incantamentum . . . quod medicinae quoque auctoritas admittit." Concerning the material preserved cf. again L. Deubner, *Greek charms and amulets*, I. c.

¹¹⁸ Jones, I. c., IV, p. 423: *καὶ τὸ μὲν εὐχεσθαι ἀγαθόν. δεῖ δὲ καὶ αὐτὸν συλλαμβάνοντα τοὺς θεοὺς ἐπικαλεῖσθαι*. Cf. p. 447: "I have discovered regimen, with the gods' help, as far as it is possible for mere man to discover it." Withington's opinion that the book shows an irreligious attitude is certainly incorrect, I. c., p. 142.

“So with this knowledge . . . precautions must be taken, with change of regimen and prayers to the gods . . . that all dangers may be averted.”¹¹⁹ He firmly believes then, in the power of prayers, although he thinks it necessary not to rely on them alone where other means are available too. In the same way the efficacy of prayers is presupposed in another Hippocratic treatise which refutes the theory that a certain disease can be understood as holy. For “if we suppose this disease to be more divine than any other, it ought to have attacked, not the highest and richest classes only of the Scythians, but all classes equally—or rather the poor especially, if indeed the gods are pleased to receive from men respect and worship, and repay these with favours. For naturally the rich, having great wealth, make many sacrifices to the gods, and offer many votive offerings, and honor them, all of which things the poor, owing to their poverty, are less able to do; besides, they blame the gods for not giving them wealth, so that the penalties for such sins are likely to be paid by the poor rather than by the rich.”¹²⁰ The belief that god would benefit rich people more than poor ones because he receives greater offerings from them is at least the basis of this argument. There is no reason to assume that the Hippocratic physicians are opposed to the validity of prayers.

At a later time no discussion of prayers is found in medical books, Galen holding that it is better to recognize the power of God by understanding the world than by sacrifice.¹²¹ This reticence concerning prayers or even their renunciation does not involve, however, any hostility to religion; it is in accordance with the attitude of the philosophers and with that of pious men in general. From Socrates on it is held to be offensive rather than reverent to ask favours of the gods. The pious man is allowed only to express his gratitude;

¹¹⁹ Jones, l. c., IV, p. 437: οὕτω γινώσκοντα χρή προμηθεῖσθαι καὶ ἐκδαιτῆσθαι καὶ τοῖσι θεοῖσιν εὐχεσθαι . . . ἀποτρόπαια τὰ χαλεπὰ εἶναι πάντα.

¹²⁰ Jones, l. c., I, p. 129: καίτοι ἐχρῆν, ἐπεὶ θειότερον τοῦτο τὸ νόσενμα τῶν λοιπῶν ἐστίν, οὐ τοῖς γενναιοτάτοις τῶν Σκυθῶν καὶ τοῖς πλουσιωτάτοις προσπίπτειν μούνοις, ἀλλὰ τοῖς ἅπασιν ὁμοίως, καὶ μᾶλλον τοῖσιν ὀλίγα κεκτημένοισιν, εἰ δὴ τιμώμενοι χαίρουσιν οἱ θεοὶ καὶ θαυμαζόμενοι ὑπ’ ἀνθρώπων καὶ ἀντὶ τούτων χάριτας ἀποδιδόασιν. εἰκὸς γὰρ τοὺς μὲν πλουσίους θύειν πολλὰ τοῖς θεοῖς καὶ ἀνατιθέναι ἀναθήματα ἐόντων χρημάτων πολλῶν καὶ τιμᾶν, τοὺς δὲ πένητας ἥσσον διὰ τὸ μὴ ἔχειν, ἔπειτα καὶ ἐπιμεμφομένους ὅτι οὐ διδόασιν χρήματα αὐτοῖσιν, ὥστε τῶν τοιούτων ἁμαρτιῶν τὰς ζημίας τοὺς ὀλίγα κεκτημένους φέρειν μᾶλλον ἢ τοὺς πλουσίους.

¹²¹ Galen, De usu partium, l. c., cf. p. 216, 44.

he may thank but can do no more.¹²² The physicians, in adopting this attitude, follow the development of the religious feeling among the Greeks.

At the same period incubations have become the more recognized form of religious healing; they have replaced prayer which is no more an adequate procedure. These incubations are dream-healings: either the way of curing is revealed to the patient or he is cured immediately by the god. Now, as regards mantic dreams, most of the physicians of all centuries admit their reality; they acknowledge even their divine character. In the Hippocratic Corpus "those dreams being divine and foretelling to cities or to private persons things evil or things good" are expressly named.¹²³ Herophilus distinguishes dreams sent by God from those which are natural. The Empiricists too reckon with the divinity of dreams; Rufus recounts such dreams as does Galen.¹²⁴ The Methodists are the only physicians who apparently do not believe in divine dreams; they never mention them. However, it seems justifiable to state that the great majority of Greek physicians recognize the divinity of dreams. And this is not at all astonishing, for almost all Greek philosophers did the same. Epicurus alone objects to such a theory, and it must be on account of Epicurean influence that the Methodists are the only physicians to disapprove of the value of mantic.¹²⁵

Divine dreams are at first held to be unintelligible to physicians although dreams caused by physical factors can be interpreted by them. The Hippocratic author says: "such dreams as are divine have interpreters in those who possess the art of dealing with such things," namely in the priests.¹²⁶ Only the physical dreams are to be

¹²² Cf. J. Bernays, l. c., pp. 104-105. Diogenes Laertius VII, 124 is heretical.

¹²³ Jones, l. c., IV, p. 423: 'Οκόσα μὲν οὖν τῶν ἐνυπνίων θεῖά ἐστι καὶ προσημαίνει ἢ πόλεσι ἢ ιδιώτησι ἢ κακὰ ἢ ἀγαθὰ.

¹²⁴ Herophilus: Doxographi Graeci, 416, 14-22; Empiricists: Deichgräber, Die Griech. Empirikerschule, 1930, p. 78, 28; 95, 8; 149, 24; 150, 12; Rufus: Oribasius, III (CMG VI, 6, 1, 1931, p. 192, 3 sq.); Galen, Opera, ed. Kühn, XI, p. 341; XVI, p. 221; Asclepiades: Galen, Opera, ed. Kühn, II, p. 29.

¹²⁵ Cf. Cicero, De Divinatione, I, 5-6, where it is said that even Democritus adopted the belief in dreams. Concerning Pythagoras cf. Diogenes Laertius, VIII, 32; concerning the Stoa also Doxographi Graeci, p. 416, 10. Xenophanes and Epicurus resist the dogma. The old Academy acknowledged it, the new Academy was undecided in its judgment as was Panaetius (cf. Herzog, Die Wunderheilungen v. Epidaurus, l. c., p. 61).

¹²⁶ Jones, l. c., IV, p. 423.

interpreted by physicians: "All the physical symptoms foretold by the soul, excess, of surfeit or of depletion, of things natural, or change to unaccustomed things, these also the diviners interpret, sometimes with sometimes without success. But in neither case do they know the cause, either of their success or of their failure. They recommend precautions to be taken to prevent harm, yet they give no instruction how to take precautions, but only recommend prayers to the gods."¹²⁷ Thus part of the realm of the diviners is in the 5th and 4th centuries B. C. usurped by the physicians and declared to be their own. But the priests are still the only interpreters of divine dreams.

Yet later on also physicians do interpret the divine dreams as well as the physical ones. The Empiricists and Galen do not ask the diviners about the contents of dreams, they understand them by themselves. This type of divination becomes a science of its own, and now "the divine prescriptions are simple and have nothing mysterious . . . , they fall within medical reasoning."¹²⁸ At the same time a change in the theoretical understanding of dreams takes place. In the Hippocratic book, although it is the soul which tells beforehand what will happen, it is the body which causes the dreams.¹²⁹ But Herophilus declares dreams to be merely psychological phenomena; it is not the bodily changes but only the psychic changes that are manifested in dreams; these are the natural dreams which have to be separated from the divine.¹³⁰ His theory comes to be generally recognized even by the diviners. The book of Artemidoros, which is the most famous treatise on the interpretation of dreams, takes over its theory almost verbally from Herophilus.¹³¹

¹²⁷ Jones, l. c., IV, p. 423: *ὁκόσα δὲ ἡ ψυχὴ τοῦ σώματος παθήματα προσημαίνει, πλησμονῆς ἢ κενώσιος ὑπερβολὴν τῶν συμφυτῶν ἢ μεταβολὴν τῶν ἀηθέων, κρίνουσι μὲν καὶ ταῦτα, καὶ τὰ μὲν τυγχάνουσι, τὰ δὲ ἀμαρτάνουσι, καὶ οὐδέτερα τούτων γινώσκουσι δι' ὃ τι γίνεταί, οὐθ' ὃ τι ἂν ἐπιτύχωσιν οὐθ' ὃ τι ἂν ἀμάρτωσι, φυλάσσεσθαι δὲ παραινέοντες μή τι κακὸν λάβῃ. οἱ δ' οὖν οὐ διδάσκουσιν ὥς χρὴ φυλάσσεσθαι, ἀλλὰ θεοῖσιν εὐχέσθαι κελεύουσι.*

¹²⁸ Artemidoros, *Oneirocritos*, ed. R. Hercher, 1864, p. 215, 1 sq.: *τὰς δὲ συνταγὰς τῶν θεῶν ἥτοι ἀπλᾶς καὶ οὐδὲν ἐχούσας αἰνιγμα εὐρήσεις.* Cf. in general A. Bouché-Leclerq, *Histoire de la divination dans l'antiquité*, I, 1879, pp. 295 sq.

¹²⁹ Jones, l. c., IV, p. 420.

¹³⁰ Herophilus, l. c., 416, 14: *Ἡρόφιλος τῶν ὀνείρων τοὺς μὲν θεοπέμπτους κατ' ἀνάγκην γίνεσθαι, τοὺς δὲ φυσικοὺς ἀνειδωλοποιουμένης ψυχῆς τὸ συμφέρον αὐτῇ καὶ τὸ πάντως ἐσόμενον . . .*

¹³¹ Cf. Bouché-Leclerq, l. c., I, p. 297, who gives a thorough analysis of the book

What are the reasons for the belief in the validity of dreams? They are partly philosophical but differ according to the various systems.¹³² Yet the fact that the Empiricists also acknowledge the reality of divine dreams already indicates empirical proof too, for this school has no other valid principle. Accordingly it is sometimes expressly stated that "some dreams are prophetic for this is shown by experiment."¹³³ Nay, even the dream-interpreters rely on experience rather than on argument. They say that the validity of dreams can hardly be proved by reason but that it can be shown by experience.¹³⁴ Dreams, to the ancients, are a natural phenomenon even when they are considered to be divine and as such they belong to natural science. There is then no reason for the scientific physician to object to healing by priests according to advice given in temple dreams.

But the physicians could not object to the miracles performed by the god either. For ancient dogmatic philosophy acknowledges the possibility of miracles. This depends on the fact that the natural laws are not held valid by the Dogmatists in every case but only in most cases. Exceptions are then always possible; things may happen for reasons still unknown, but they are not at all contrary to nature. Aristotle says: "It is the miracle, a thing contrary to nature but not contrary to nature as a whole, rather contrary to it as it appears in most cases. For in regard to the eternal nature which acts with necessity nothing comes into being contrary to it."¹³⁵ This sentence is valid for later generations too. Also the Stoic philosophers and

of Artemidorus and also names all the physicians and philosophers interested in the theory of dreams.

¹³² Cf. e. g., Aristotle, *On Dreams* and p. 240, 125.

¹³³ Galen, *Opera*, ed. Kühn, VI, p. 833: *καὶ δὴ τινα μαντικῶς ὑπ' αὐτῆς (sc. τῆς ψυχῆς) προδηλοῦνται, καὶ γὰρ τοῦτο τῇ πείρᾳ μαρτυρεῖται.*

¹³⁴ Artemidorus, l. c., p. 1, 11; 15-16 . . . *περὶ ὧν ἂν ἔχω κατάληψιν, ἣν διὰ πείρας ἐπορισάμην, συγγράψαι . . . φέρων εἰς τὸ μέσον τὴν πείραν καὶ τὴν τῶν ἀποτελεσμάτων μαρτυρίαν, ἣ πᾶσιν ἱκανὴ γένοιτ' ἂν ἀντισχεῖν ἀνθρώποις, καὶ μέντοι καὶ πρὸς τοὺς χρωμένους μὲν μαντικῇ διὰ δὲ τὸ μὴ ἐντετυχηκέναι λόγοις περὶ τούτων ἀκριβέσι πεπλανημένους.* Cf. p. 197, 12; 198, 14; 199, 1. Just because of their experimental basis dream-interpretations must not be identified with magic. Artemidoros therefore rejects every kind of magical belief and opposes magicians no less than do the doctors. Cf. p. 205, 25-206, 11.

¹³⁵ Aristotle, *On the Generation of Animals*, IV, 4, 770b9. *ἔστι γὰρ τὸ τέρας τῶν παρὰ φύσιν τι, παρὰ φύσιν δ' οὐ πᾶσαν ἀλλὰ τὴν ὡς ἐπὶ τὸ πολὺ. περὶ γὰρ τὴν αἰὲ καὶ τὴν ἐξ ἀνάγκης οὐθὲν γίνεταί παρὰ φύσιν.* Cf. Zeller, l. c., II, 2³, p. 429, 3.

the Neo-Platonists are able to understand miracles as nothing more than events whose causes are unknown. Dogmatic medicine, then, based on rational philosophy cannot oppose religious cures; miracles are not excluded by its conception of science. The Empiricists, on the other hand, cannot disapprove of miracles since they acknowledge no general rules beyond experience. There is no sufficient reason to allow them to contradict those facts. Only the Epicureans who try to explain everything and do not acknowledge the assumption that something can happen without an intelligible reason are opposed to miracles.¹³⁶ Therefore, the Methodists, the physicians of late antiquity who were especially influential in Roman centuries, are the only ones who must reject religious medicine as well as magical medicine. But in general, physicians, as scientists, believe in miracles.

But doctors never expressly advise the use of prayers or of incubations.¹³⁷ It is possible only to infer from their theory that they must have acknowledged the validity of prayers and of dreams. This conclusion leads to a very strange problem. If religious medicine cannot be rejected by physicians, is it considered to be valuable in certain cases? And in which cases? Or is it that physicians only believe it possible to be cured by divine help but that they do not

¹³⁶ Cf. Zeller, l. c., V, p. 697, 6; 704; 720. Dilthey (Das natürliche System der Geisteswissenschaften im 17. Jahrhundert, Gesammelte Schriften, II, 1923, p. 132) stresses the point that miracles could not be entirely discarded until the system of Descartes. The "Begriff von der ausnahmslosen Macht und Geltung der Naturgesetze . . . entstand erst, als durch Descartes alle psychischen Kräfte aus der Natur vertrieben worden waren." Concerning Epicurus cf. Lucretius, De Rerum Natura, I, v. 150-54.

¹³⁷ R. Herzog, Die Wunderheilungen v. Epidauros, Philologus, l. c., p. 149; p. 61, believes, along with others, that the passage to be found in the book on Sacred Disease: *θύειν τε καὶ εὐχέσθαι καὶ ἐς τὰ ἱερὰ φέροντας ἱκετεύειν τοὺς θεούς* (Jones, l. c., II, p. 148) "auf die Incubation hinweise." Such an interpretation, however, spoils the argument used by the Hippocratic author. He has claimed that the patients if really possessed by god, should not be purified; he adds "one should rather if such patients are to be found pray to the gods and bring them to the temples." For it is his belief that the possession by god, since it is divine, should not be driven away but revered. The Scythians behaved similarly for they revered those men who were possessed by a god (cf. Jones, l. c., I, p. 127). If incubations were advised by the author this would mean a kind of healing which is necessary only if such men are ill, a contention which the author starting from the presuppositions of his enemies tries to refute. The healing of diseases by prayer alone was not recommended before Christian times, cf. Epistle of Jacobus, ch. V, 4, 5, 16; The Acts, ch. XL, 20; ch. V, 15.

resort to it themselves? This would be strange too. But there is no indication to be found in the medical writings as to when patients should use religious medicine and when they should use human medicine. At least, there is no direct indication. Indirectly, I think, it can be deduced from the facts upon what occasions the physicians themselves allow their patients to go to the temple: It is the case of chronic diseases or of every disease which cannot be cured by human knowledge.

The negative attitude of the Greek physicians in many diseases has always been felt to be puzzling. They seemed to be satisfied with the statement that such and such a man can be helped no more. They advised against treating patients who cannot be cured, and believed it to be part of their art both to know in what cases the physician cannot accomplish anything and, in those cases, to refrain from doing anything. This, no doubt, is a very peculiar, even inhuman behaviour. For it excludes the help of the physician in diseases which are gravest and in which his help is most needed. But such an attitude becomes immediately intelligible if the physician presupposes that the patient, if not treated by him, will go to the temple.

When the art of the physician fails, everybody resorts to incantations and prayers;¹³⁸ this phrase was frequently quoted in antiquity. It is especially true in chronic diseases, as it is said: "Those who are ill with chronic diseases and do not succeed by the usual remedies and the customary diet turn to purifications and amulets and dreams."¹³⁹ For, of course, one will not go to the god if the case is not serious. Therefore it is a topic of the temple-cures

¹³⁸ Diodorus, Fr., XXX, 43. Dindorf: *ἐκεῖνοί τε γὰρ [οἱ ἐν ταῖς μακραῖς νόσοις δυσποτομῶντες] ὅταν ταῖς παρὰ τῶν ἰατρῶν θεραπείαις ὑπακούσαντες μὴδὲν βέλτιον ἀπαλλάττωσι καταφεύγουσιν ἐπὶ τοὺς θύτας καὶ μάντεις, ἔνιοι δὲ προσδέχονται τὰς ἐπωδὰς καὶ παντοδαπὰ γένη περιάπτων.* Cf. Pliny, N. H., XXX, 98.

¹³⁹ Plutarch, *De Facie in orbe Lunae*, 920b: *οἱ ἐν νοσήμασι χρονίοις πρὸς τὰ κοινὰ βοηθήματα καὶ τὰς συνήθεις διαίτας ἀπειπόντες ἐπὶ καθαρμῶν καὶ περιπτα καὶ ὀνείρων τρέπονται.* Cf. the stories related about Pericles (Plutarch, *Pericles*, ch. 38), Bion (Diogenes Laertius, IV, 54), Cleomenes (Plutarch, *Sayings of Spartans*, 223 E) which prove that this attitude is not restricted to the lower classes or to any century. It is the general reaction of men (contrary to Rohde, l. c., p. 89 and Welcker, l. c., p. 69). Since the physicians did not acknowledge magical help to be possible, they were the more interested in that their patients resorted to religious medicine.

that the god could help when the physicians could not.¹⁴⁰ In a world in which the temples of Asclepius are open to everybody who is ill it need not be mentioned that the patient can and should go to the god if the human physician cannot do anything for him. It is sufficient to state in which cases the physician can do no more. The consequence that the patient then should try to find help with the god is self-evident and removes the responsibility of the physician, as it relieves his conscience. This, at least, is true in so far as the physician has no ground for objecting to the healing by the god, since he acknowledges divine cures as real and helpful. It is not by chance, then, that the Methodists were the first to treat chronic diseases regularly; they were the only physicians who objected to the possibility of divine interference. But in general, religious medicine is, throughout antiquity, a subsidiary of human healing by surgery, diet, drugs, and music.

To sum up the results of my inquiry: Greek medicine in its aetiology as well as in its treatment of diseases is rational and empirical. About this fact there can be no doubt. But this is Greek rationalism and empiricism: it is influenced by religious ideas. God and His action are powers reckoned with by the physicians in their theory and in their practice. Every form of magic, however, is rejected as useless and wrong. If it is explained at all, it is on account of a religious belief that the physicians renounce magical superstition. Certainly, in many cases the Sceptic in his resignation also refrains from magical ideas. But this resignation, then, is not restricted to the renunciation of magic alone. It means also the

¹⁴⁰ Cf. Weinreich, *Antike Heilungswunder*, l. c., p. 195 sq. "Zur Topik der Wundererzählung, die Kunst der Ärzte versagt." A survey on incantations and the diseases in which they are used also shows that they are especially relied on in chronic diseases. Herzog, in his commentary to the tablets of Epidaurus (*Die Wunderheilungen v. Epidaurus*, l. c.) expressly mentions that the diseases cured by the god are those which are not or cannot be cured by human physicians. Later, when the chronic diseases are also treated by physicians, the religious incubations are more restricted to the revelation of remedies, and the type of illnesses dealt with in the temples changes (Weinreich, l. c., pp. 113 sq.). Still, the god performs miracles as in the case described by Rufus, cf. p. 240, 124 and in this sense religious medicine of course could never be replaced by human medicine. For, as Rufus says: "If somebody were so good a physician that he could provoke fever (as the god can), there would be no need for any other procedure of healing."

disapproval of every aetiology and is therefore destructive of medical science. Moreover, the majority of physicians belong to the Dogmatic school. The Dogmatists and the unknown practitioners are religious and hostile to magic which is held to be superstition. From the beginning till the end of antiquity there is no change in the attitude of the physicians in this respect. The relation of medicine to religion and magic therefore, cannot be used for distinguishing different epochs of medical history. Greek medical art is a science, it is the beginning of modern science and yet different from it in its foundation.

